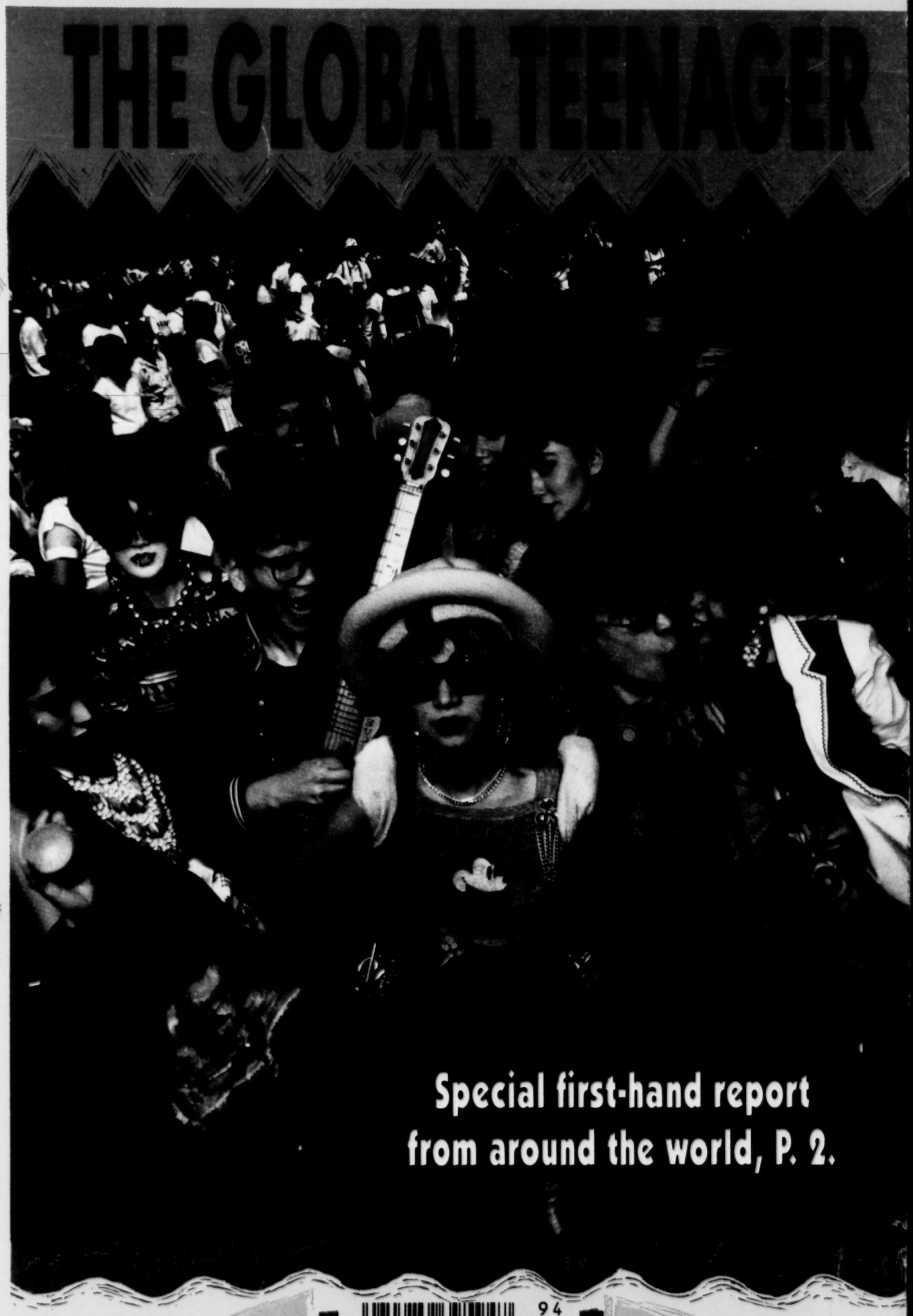
NO. 65 WINTER 1989 $5 ($6 CANADIAN)

WHOLE EARTH REVIEW

ACCESS TO TOOLS AND IDEAS

THE GLOBAL TEENAGER



Special first-hand report from around the world, P. 2.

A FREE WORLDWIDE COMPUTER NETWORK
P. 112

HEALING, REMISSIONS, AND MIRACLE CURES
P. 126

SHOPPING FOR BUDDHAS
P. 79

SNOW BICYCLING
P. 94

0 70989 39594 7 94

2 The Global Teenager
by Will Baker;
photos by Amon Rappaport

36 Selling the World
Mouseketeers to marketeers
by Kevin Kelly

38 Apocalypse Juggernaut, Goodbye
by Kevin Kelly

41 People . . . Ya Gotta Love 'Em
by R. Crumb

44 The Age of Endarkenment
We're entering a period of history marked by adolescence without initiation
by Michael Ventura

54 The Question Machine
What kinds of questions do you ask a machine?
by Michael Naimark

56 Baltic Rocks
The singing revolutions in the Soviet Union
by Peter Riggs

68 Mail Art Glasnost
Access to postal citizen diplomacy in the Soviet Union
by Chuck Welch

72 Teaching English in Japan
by Dick Fugett

74 Dharma Database
Young Tibetan monks computerize traditional Buddhist literature
by John Malpas

79 Shopping for Buddhas
by Jeff Greenwald

84 A Spiritual Guide to Manhattan
by Sparrow

94 Below-Zero Bicycling
by Alys Culhane

96 Costa Rica Saves the World
by Stewart Brand

110 Hello, Central
Phone conferencing tips
by Louis Jaffe

112 The Usenet Underground
Tap into a worldwide network built on controlled anarchy and nearly free access
by Robert Horvitz

118 Access to Conservatism
by Jay Kinney

124 Fracture of Another Sort
When the penis breaks

126 Healing, Remission, and Miracle Cures
by Brendan O'Regan

The Global Teenager, depicted by global teenagers.

To get a picture of the way global teenagers view themselves, we had a high-school class compose collages of "The Global Teenager." But it was not an ordinary class in an ordinary school. The kids who created the images featured here attend the Newcomers High School in San Francisco. This is a special one-year high school for newly arrived students who have limited or no English-language skills. They arrive in the Bay Area as immigrants and refugees from all over the world. With an astoundingly high percentage of "ethnic" students streaming into the city, San Francisco schools found that newcomers adapted more quickly to school culture and English when they were together with kids in a similar situation, even if they weren't from the same country. The kids in this particular class are from Vietnam, Nicaragua, El Salvador, and China. Kids from Bolivia, Colombia, Ethiopia, Cambodia, and about two dozen other nationalities roam the halls. Looking and acting like the global teenagers they really are.

For many kids in the class, this was the first piece of art they had ever made. I supplied them with a carton of international magazines which were about to be tossed by the local newsstand, scissors, glue, and a few tips. Teacher Patricia Campe-Aguilar oversaw the five class periods that it took to explain and produce the collages. It took them a while to loosen up; they took the assignment very seriously. Once they got going, looking over each other's shoulders for inspiration, they smiled at their own outrageousness. The artists, from left to right: Kelly Tseng, Hui Wen Huang, J. Paredes, Denys Tsang. Four from a generation that will dwarf the sixties in impact and surprise. Report begins next page. —Kevin Kelly

Give Whole Earth Review

Yes, I'd like to share Whole Earth Review with a friend or relative. Please send the following gift subscription(s) on my behalf and send a card to the recipient announcing my gift.

$20 FOR THE FIRST 1-YEAR SUBSCRIPTION
$12 FOR EACH ADDITIONAL SUBSCRIPTION
(40% OFF THE REGULAR PRICE)

____ Bill me ____ Check or money order enclosed
(US funds payable on a US bank)

Charge my VISA ____ MasterCard ____

Card # _____-_____-_____-_____

Exp. date _____ /____

Signature _____

Please add $4 per year for Canadian and other foreign subscribers ($8 Air Mail).

Attach additional orders on a separate sheet.

New subscriptions begin with our next quarterly issue.

WHOLE EARTH REVIEW • P.O. Box 38,
SAUSALITO, CA 94966 • 415/332-1716

Send Whole Earth Review as my gift to:

Name _____

Address _____

City/State/Zip/Country _____

_____

____ New ____ Renewal

Send Whole Earth Review as my gift to:

Name _____

Address _____

City/State/Zip/Country _____

_____

____ New ____ Renewal

My Name _____

Address _____

City/State/Zip/Country _____

_____

____ P.S. Send *me* a year of Whole Earth Review

____ New ____ Renewal

B65 BN

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 13 SAUSALITO, CA

POSTAGE WILL BE PAID BY ADDRESSEE

WHOLE EARTH REVIEW

P.O. Box 38
Sausalito, CA 94966-9932

WHOLE EARTH REVIEW

DEPARTMENTS/REVIEWS

GLOBAL PERSPECTIVE

50 The New Realities

51 The Ultimate Resource □ Discos and Democracy

52 New World of Travel 1989 □ Host Family Survival Kit

53 Creating Our Future □ Asiaweek □ Youth News Service □ Mainstreet America and the Third World

67 Back in the USSR □ Glasnost

78 Video Night in Kathmandu

LEARNING

89 Sudden Fiction □ The Gentle Art of Verbal Self-Defense

90 **Science Toys** *by Jeanne Carstensen*

92 Sharing the Joy of Nature □ Hug a Tree

93 How to Shit in the Woods □ The Riddle of Amish Culture

PLACE

100 This Incomperable Lande □ Rural Property Bulletin

101 **Tree Books by Alex Shigo** *by Richard Nilsen*

102 Dog Law □ Nite Lite □ A Time To Reap

103 America's Neighborhood Bats □ The Antique Rose Emporium

CRAFT

104 Everybody's Radiation Handbook □ Radalert □ Boeing T-9

105 The Way Things Work □ Stone

106 Complete Fix-It-Yourself Manual □ Upstream Waistbelt Thermos □ Dresser Fittings

107 Grizzly Imports, Inc. □ Antique Tool Collector's Guide

COMMUNICATION

108 Satellite Watch Newsletter □ The Scanner Book

109 John's Picks □ Words on Tape □ Poetry on Tape □ Zone VI

116 The Matrix □ BMUG Mac Support □ 3-D Catalog

117 CompuAdd □ Data Informer

120 Zeta Magazine □ League of Nations Trading Cards □ The Great Divide

121 The Wall Street Journal Guide to Understanding Money and Markets

COMMUNITY

122 Home Playgrounds □ City Safaris

123 Gun-Proof Your Children □ The Survival Game

125 A Doctor's Guide to Men's Private Parts □ Products for the Visually Impaired

GATE FIVE ROAD

136 Unclassifieds

138 Backscatter

140 Thank You

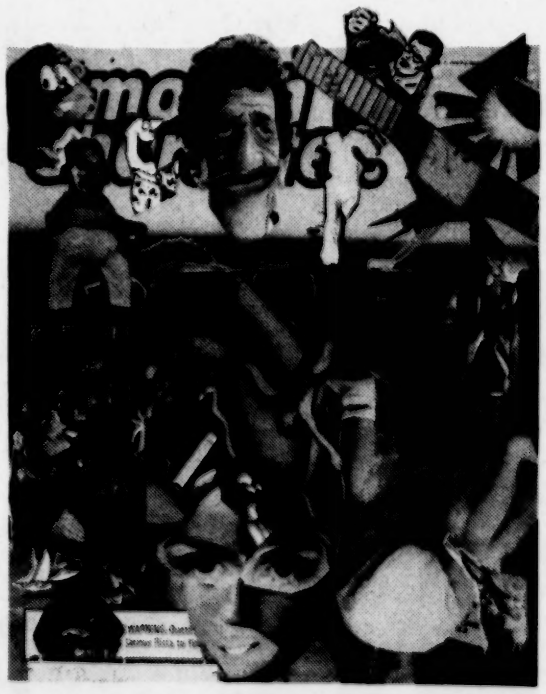
141 Reader Services

142 Gossip

143 Masthead □ Financial Report

145 Back Issues Revisited

FRONT COVER: Every Sunday, masses of Japanese teenagers gather on a wide boulevard in Tokyo, called the Harajuku. They bring portable tape recorders and dance in the wide pedestrian avenue. Particularly conspicuous are the *takenokozoku*, kids decked out in outrageous fashions from fashion boutiques or in the costumes of Hell's Angels and punks. In the center of this photo is pop singer Sato Chika and friends, with fashions from Irie Sueo. It's all part of a ceremonial weekend rebellion in Japan. The following Monday, the kids will be in conventional dress, being good students. **Photo by Taishi Hirokawa.**



BACK COVER: This hand-colored woodcut (original size 16" x 21") was one of a series of prints made by an 18-year-old Korean student for the anniversary of the 1980 Kwangju massacre in Korea. As in the Tiananmen Square massacre in China, student protesters were slain by government troops. This series depicts the events of that day. Because of government restrictions these prints were not allowed to be displayed off the university campus in Seoul. The full series was bought and sent to us by Hal Palmer. He is looking for a gallery willing to frame and display them. —Kevin Kelly

Whole Earth Review □ *Issue No. 65 □ December 11, 1989 (ISSN 0749-5056) (USPS 077-150). Published quarterly by POINT, a California non-profit corporation. Editorial office: 27 Gate Five Road, Sausalito, CA 94965; 415/332-1716. Subscriptions $20 per year; single copies $5. Inquire for first class and international air rates. Second-class postage paid at Sausalito, California, and at additional mailing offices. Claims for missing issues will not be honored later than six months after publication. Back issues are available on microfilm and as xerographic reprints from University Microfilms International, Serials Bid Coordinator, 300 Zeeb Road, Ann Arbor, MI 48106. Whole Earth Review is indexed by Access: The Supplementary Index to Periodicals, Alternative Press Index, Magazine Index, Consumers Index, and Humanities Index.*

Copyright © 1989 by POINT. *All rights reserved.*

Subscription circulation: 21,752. Newsstand circulation: 31,150.

POSTMASTER: Send address changes to Whole Earth Review, *P. O. Box 38, Sausalito, CA 94966.*

THE GLOBAL TEENAGER

Premise: *By some time in the mid-1990s, over half the humans on earth will be under the age of 20.*

Hypothesis: *Along the way these billions of teenagers will listen to the same music, watch the same movies, wear the same clothes, and perhaps study the same things in school. There is a Global Teenager emerging, global in both proportion and perspective.*

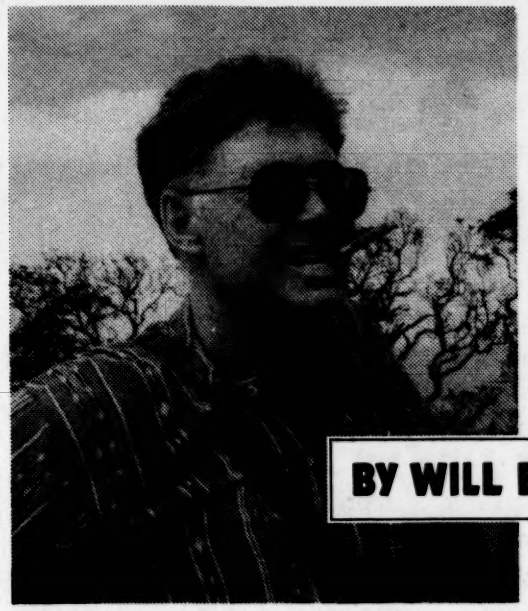
Experiment: *Go around the world (see map above) and ask teenagers directly what they think. Use a standard questionnaire. Visit the most representative countries on five continents. Talk to teenagers from as many backgrounds as possible.*

Principal investigators: *Author Will Baker, 54, professor of English at the University of California/Davis, on a one-year sabbatical. Photographer/caption writer Amon Rappaport, 17, high-school senior in Larkspur, California. Editor Kevin Kelly, originator of the project. Researcher Corinne Cullen Hawkins, who tabulated the surveys. Futurist Stewart Brand, who brought the hypothesis to* WER*'s attention, and coined the term "Global Teenager." The survey was taken in May and June, 1989.*

Funding: *Travel expenses of $5,500 were paid by the Global Business Network (GBN), an innovative think tank co-founded by Peter Schwartz, specializing in scenarios of the future on a global scale. GBN developed the original Global Teenager thesis. The editorial and research compensation was paid by Point/*WER.

Contributors: *Many thanks to Tony Jenkins, world vagabond and staff political cartoonist for Toronto's* Globe and Mail, *for sketches from his notebook of unforgettable characters along international backroads. And thanks to overseas subscribers to* WER, *who interviewed local teenagers: Ralph R. Lovelace, Glenn Clayton, Cynthia Newby Luce, N. Kalogeras, Robin Grose Blake, Rene Berger, Edwin Todd, Catherine Riess, Arto Kytohonka, and Thomas Laird.*

—Kevin Kelly



BY WILL BAKER

The Project:

We begin with three simple propositions and the question they naturally provoke.

The Propositions:

1) Some demographers believe that the world's population is getting younger, so that by the year 2000 more than half the people on the planet will be under twenty. Already several nations (Botswana, Ethiopia, Honduras, Kenya, Syria, Jordan, Togo, Samoa) have a citizenry mostly under *sixteen*.

2) The development of a worldwide communication and transport network (satellite transmission, fax, jet travel) potentially puts most of these youngsters in vivid touch with one another.

3) Evidence already exists that the American mode of "youth culture" (jeans and jogging shoes, rock videos and Walkmans, designer drugs and body building) has been successfully exported throughout the rest of the world.

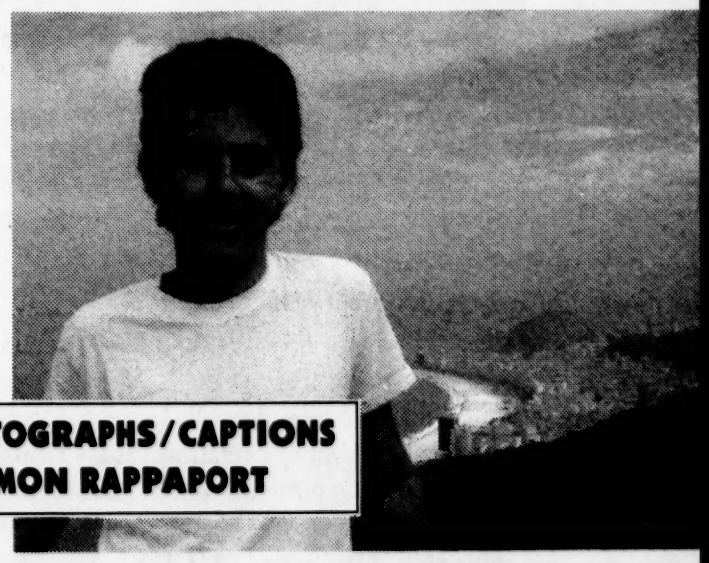
The Question:

Is, therefore, a certain homogeneous or composite type — call him/her the Global Teenager — emerging? A new breed of youth, citizen of the world? Member of the ultimate extended family or monster gang?

The Crew

I undertook to investigate this question, and a number of others that follow from one's response to it, with a great deal of trepidation. Detailing this unease would, I think, serve effectively to outline some of the project's limitations as well as my own.

At the most practical level I had neither the time nor the inclination nor the qualifications for such a daunting task, which involved — for starters — a 48-day lightning tour of the globe, a dozen countries, followed by a forcibly compressed two months of research and writing to meet a September deadline. I was already in the middle of a novel, with a new family to relate to and a big garden in the ground. Most obviously of all, I was not currently a teenager and had not been one for a very long time. I did help raise a girl a few years ago, but she swam about as far outside the mainstream as it is possible to get. By my best estimate, my daughter was two or three thousand years old when she was born. She never manifested any dependable interest in sex, drugs, rock 'n' roll, cars, dresses, or the stock market. She used a $65,000 Vassar education to learn how to become a Tibetan Buddhist nun, specializing in carpentry. No model, in short, of the average terrestrial kid.



PHOTOGRAPHS/CAPTIONS BY AMON RAPPAPORT

Another and stronger reason to refuse the assignment was an immediate stirring of old memories, a reconnection to the heat and pressure of my own distant youth.

In twenty-five years as a college teacher, I have spent time with thousands of American teenagers, but surviving this contact has required development of very thick professional insulation. Not only are the young

Acknowledgements: *Indispensable to this investigation were the efforts of several guides, translators, companions, and advisors listed below. Some were friends of friends, contacted in advance, and others materialized spontaneously when they were most needed. We are deeply grateful for their help, and reassured that with such guardian spirits, this teenaged planet of ours still has a chance to make it.*

Roque Fuentes and the Pacheco family in Guatemala City; Professor **Carlos Garcia** in Antigua; **Charles Johnson** in Rio; **Professor Juan Alberto Matsumoto** and **Ruben Bertini** in Argentina; **Irish Pat** at UPI in Hong Kong; **Jeff Roush** in the Orient; **Sutanyar Pholsen** and the good Fathers at Saint Dominic School in Bangkok; **Tim Ceha and John Madanguda** in Kenya; **Muna Hamzeh** in Jerusalem; **Mike and Oleg** in the U.S.S.R.; **Ainars Lescinski** in Latvia; **Roger and Deirdre Law** and **Peter and Anne Fluck** in London; **the Unknown Russian Soldier at Passport Control** who, while meticulously comparing my face to the photo, winked back at me.

—Will Baker

ILLUSTRATIONS BY TONY JENKINS

vulnerable, intense, needy, attractive, and sometimes dangerously fragile; they are also a constant reminder of the excruciating delights, devastating errors, and appalling foolishness buried in one's own past. You learn to keep a copy of Homer or Shakespeare between you and them, serve no coffee during office hours, and advise those who enter to leave the door slightly ajar behind them.

The prospect of abandoning these distancing mechanisms, of trying actually to understand young people and deliberately elicit their deepest fears and aspirations, was highly intimidating. Talk to them — hundreds of them — during my *sabbatical?* Serious, probing, intimate talk? The notion was more than mad whimsy. It was perverse.

My remaining reservations concerned the conception and sponsorship of the whole enterprise. In the first place who in his or her right mind could believe that an investigator, in six weeks, might learn something substantial about the billion or so teenagers on the planet? Six days in China? Five in Brazil and Russia? *Three* in India? Ridiculous on the face of it.

But there were those willing to gamble on the possibility that such an investigation could be of value. *WER* has of course a well-developed reputation for carefree speculation, and no one could accuse its editors of letting scholarship get in the way of a good anecdote; but as we all know, in recent years they have plunged off into Ecopolycyberspace and gotten a new reputation as softwired creative electropersons.

They have consequently acquired a new group of business associates. For this project *WER* proposed to collaborate with a couple of small, fast-moving companies who design and deal information. These firms occasionally operate as pilotfish for multinationals, sniffing out and tracking the pheromones of new trends in style or consumption patterns. The Global Teenager, should he and she exist, would naturally be of interest to the likes of Coca-Cola or Benetton or Levi Strauss.

An intimidating prospect. To work even part-time and indirectly for the giant porkers of Late Capitalism would certainly involve contradictions with earlier stages of my career. I once wrote a whole book (*Backward*) on the horrifying impact of civilization on an Amazonian tribal people. I would also face confrontation and ridicule from my current circle of friends (doctors on Indian reservations, friends of various rivers, etc.), to say nothing of certain uncomfortable questions I would have to ask the man in the mirror.

At least, I told myself, it wasn't research in biological warfare or moving contraband toxics into impoverished countries. Plus Levi Strauss does make a good pantaloon, you have to give them that. And Coke provides a medical service in hot countries with bad water. I do take the occasional bottle in such a circumstance. Better tooth decay and high blood pressure than amoebic dysentery.

These were skimpy rationalizations, I knew, and it worried me that I kept on thinking about this project anyway. The money wasn't that much, and I didn't absolutely need it; I've had three books remaindered, so publication doesn't carry the voltage it used to. What the hell was I doing, contemplating a summer as a hybrid freelancer and market consultant?

Eventually I got down to the reasons that didn't sound hollow when I hammered on them. The first, and basest, was a compound of mere curiosity and the urge to prove myself again; that is, to know I could still, at 54, get out there and flog up a good story (This need for proof of potency is, of course, an adolescent trait of middle-aged American men). Secondly, I don't think any sort of information should be classified; if Benetton or Sony wanted access to my material, they could pay for it at market rates, just as editors do. I should have the same access, as a taxpayer, to FBI and NSC files, but that is matter for another essay. I trusted myself and *WER* enough to believe that what I said would reach the page with all its natural ingredients intact and no sugar added.

And that was the third reason: I had hopes of coming up with something to say, something that the multis and info gurus and this magazine's quirky readership should all hear. Modesty would not stand in my way.

At about this stage of things Kevin Kelly called with a new reckless idea. What did I think about taking a teenager with me? In principle, I agreed, the idea was excellent. A real live American teen could help make contact with his peers in other countries. I could watch this interaction and include it as legitimate material. The right kid could make a lot of things happen. And in any case traveling with a companion could be easier and safer.

Privately I had reservations about the wisdom of this plan, which KK was presenting with considerable enthusiasm. I could, I thought, find myself in Cairo with a diarrhetic, sniveling brat who wanted to be escorted home immediately, or on long bus rides with an ingenuous dork to whom everything had to be explained. Frankly, most teenagers from my own country struck me as alternately furtive and arrogant, and in public

places I usually avoided sitting near them. But I could check out any candidate, KK reassured me, and I would have absolute veto power.

Only a few days later the issue became concrete. Somehow, by a process I cannot now reconstruct, the whole project had moved from the theoretically feasible to an actual possibility to an assumption of participation, and a qualified teenaged companion had in fact now materialized. Amon Rappaport, a seventeen-year-old doctor's son, senior yearbook photographer at a hot Marin County high school. He had already traveled a good deal (wealthy grandparents) and was himself contemplating a career in international relations.

All this sounded ominous to me. I had been imagining a more average or regular type of guy, humbler origins, someone rather like I used to be, but in addition grateful at the prospect of mature guidance. KK had, however, already arranged for us to meet and look each other over, talk about our expectations, try out some ideas on how to proceed, and so forth. Time was getting tight, and it was possible that Amon would be the only candidate for the job.

The kid threw me off right away, standing in the parking lot outside the office. Cycling togs, a thick 'fro, and a very insouciant stance. I thought he was a delivery boy who had just dropped something off, or an Arab student on a working internship. His glance went through and around me, too, since I looked like my real destination was the sheet-metal shop down the street.

It turned into a lunch meeting, held in one of those Sausalito fast-food delis, and things got clearer there. We were all, it seemed, busy fellows who could not afford more meetings or idle chitchat. The yearbook photographer felt this even more keenly than the editor and interrupted novelist, since this trip would cost him two weeks of school at the peak of pre-final prep.

So Amon spun out a very succinct character sketch of himself, gave his take on our project, and showed us a stack of his photographs. An uncommonly articulate boy. Good-looking, too; the inheritor of some very striking Sephardic genes. The pix were not bad, either, and he had indeed traveled a good deal, to some places I'd never seen.

Kevin and I asked him some questions that allowed us to ramble on about the deeper political and psychological implications of the global teenager concept, then drifted into speculations on whether a book or TV series might come out of it. Amon lifted a hand to interrupt us, saying he had to get back to his darkroom and artwork for the yearbook and he wanted to make a couple of points before he left.

First, it was a great opportunity and he was like definitely interested. But second, he wanted to make a meaningful contribution, be a full partner in the deal, and not just window dressing, a token teen. He could shoot the pictures for the article and offer his views, so long as they would get taken seriously. Otherwise, he already had a full summer planned. So we could think it over and get back to him, okay?

Then he hooked his helmet from the handlebars, squared away, and peddled off with only one quick nod over his shoulder. KK and I looked at each other, shrugged and wondered. Lot of poise, we agreed. The kid knew his mind. Promising. But we would have to think it over and get back to each other. Actually, I think we already knew. It was just a matter of making the offer with seemly haste.

Amon turned out to be the best idea KK had on this project. He was an instant ice-breaker: quick, sensitive, amiable, and funny. His Polaroid, Walkman and tape collection blew away most language barriers, and his smile every other kind. It wasn't easy, always, for the old professor to accept this boy's cavalier ignorance of certain Great Ideas from the Tradition, or his demotic diction ("trippy dudes," "fanfuckingtastic"), or the way our subjects — especially females — clamored for his attention, quite ignoring the presence of experience and learning in the same room . . . but there were compensations.

He taught me a bit of hackysack in front of Lenin's statue, and didn't show off his own agility too outrageously. Also got me back into a little chess, pool, and ping-pong (even split on the first two, but I took him straight sets at TT). Shared a couple of nifty dinnertable magic tricks learned from his grandfather. Noticed things, visual details, that would have escaped me. Pulled a surprise in Miami, where we had a pit stop between Guatemala and Rio: talked two middle-aged waitresses in a Weinerschnitzel into singing Happy Birthday, in heavy Teutonic accents, while handing me a slab of carrot cake illuminated by one candle.

He also now and then contributed something even more valuable for the roving investigator. As mileage accumulates, one begins to think himself an authority, starts spinning out the Big Picture. If lecturing is one's *metier* anyway, there is little tolerance for those who point out petty inconsistency or venture a neophyte's dissident view. One tries to command respect (the very thing that cannot, by definition, be commanded) by wielding the sardonic aside, the raised eyebrow, the dismissive *pshaw.*

Near the end of our trip — rush hour in the London Tube, sullen, weary people lurching on the straps — I delivered a rather extended satiric riff whose subtext dealt with a certain puppy's belief that riders of the Moscow subway looked glum and beaten beyond the norm. Whereas *here* was a jolly lot, Gradgrind's legions, doubtless on their way to a few pints of cheer and a frolic at the football stadium. Oh yes. The British workingman at day's end. Picture of gaiety.

Amon's expression was thoughtful, his voice subdued, aimed not so much at me as at a baffling cosmic order.

"It just couldn't be," he said, "could it, that anybody else could ever, under any circumstances, ever have just one little idea that was any fucking good, except you."

I shut my eyes, smiled with tired, rueful tolerance.

"I was just pointing out to you — "

"You're always pointing everything out. Cynical old asshole."

He put it with a certain lightness, a kind of mark of how close we'd gotten, and eventually I came to appreciate that exchange a great deal. To last, ideas have to be finished with tough reagents, disrespect among them. The rest of the world's teenagers, I think, could use some exposure to Amon's attitude more than new reports and statistics on their condition.

Maybe healthy derision could be America's contribution, what we can export, now that our productivity on other fronts has declined. Plenty of pomposities, national treasures, shrines and sacred texts to work on, around the world. And teens, especially early teens, have an appetite for ridicule. And ridicule, of course, should begin at home. What do you think, Amon? Maybe a Coke commercial featuring a lot of wrinkled, potbellied old professors relaxing after a flag-burning? □

The Method

Minuscule and warped as our survey had to be, we wanted to compile some sort of comparative and easily read data, using the same procedures for each country. The idea was to assess the feelings and value-structures of teens, rather than the range or sophistication of their knowledge, and to get as representative a sample as time would permit.

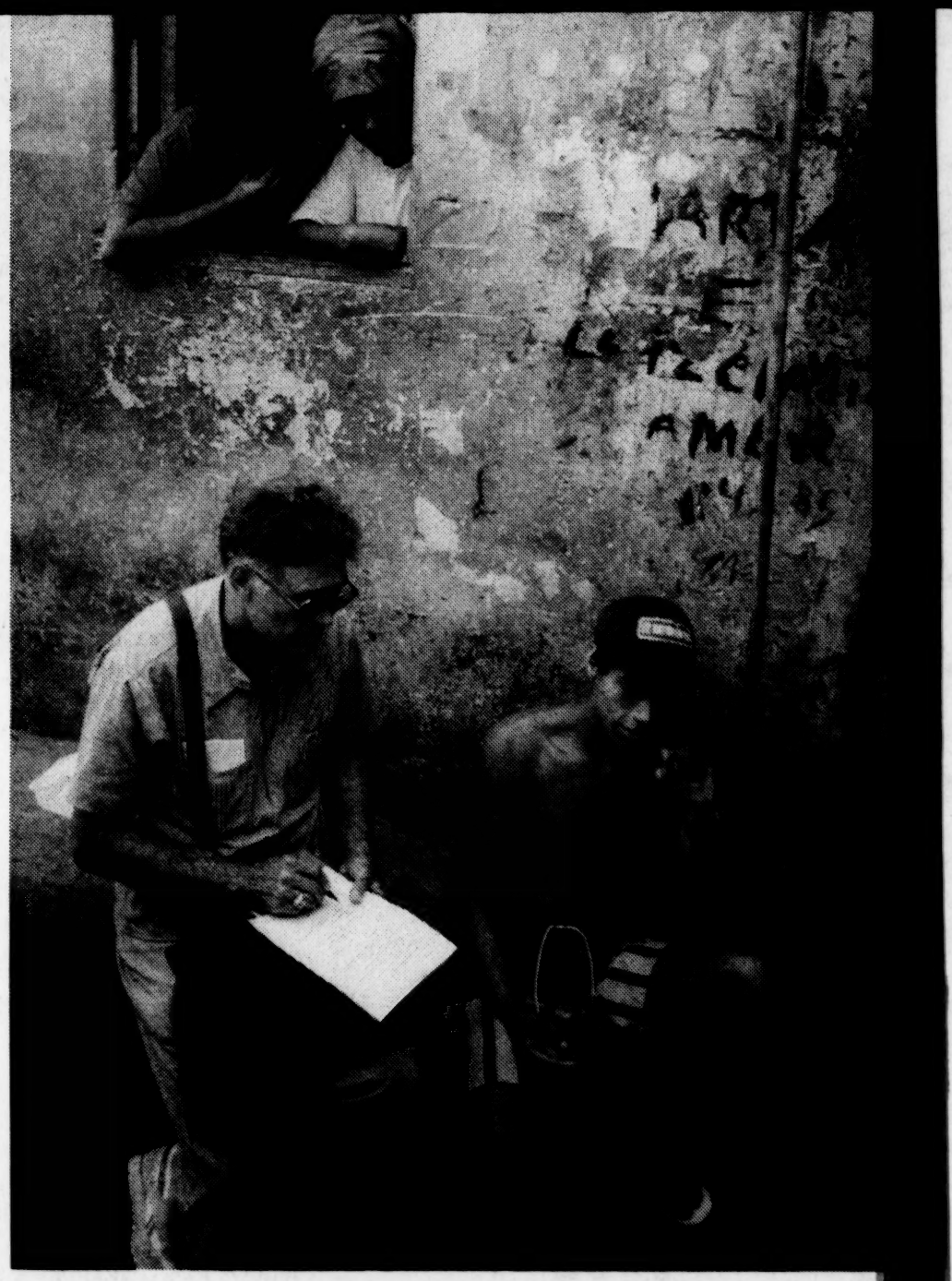
We therefore devised some ground rules:

1) Insofar as possible we stuck to subjects at least twelve and no older than twenty, and tried for a fifty/fifty balance between boys and girls. In practice, we took questionnaires from several people in their early twenties, usually because they had an unusual perspective (two British skinheads, Russian soldiers in Latvia, a pair of Masai warriors). And in some countries it was very difficult to interview young women, so we could not hope to maintain gender balance.

2) We made a serious effort in each country to spend at least a day or two in a small town or rural area, though the logistics of the expedition forced us to base our work mainly on population centers.

3) Though neither of us was a trained interviewer, we soon discovered what a tricky affair it is to get dependable straight answers to even the simplest kind of inquiry. Some groups — especially in the East — tend to compare answers and take cues from a leader. Others may seize the questions as an occasion for a passionate personal statement on tangential matters. In a classroom, no matter how many times you insist that you are not in search of "right" answers, that this is *not* a competitive exam, young people (and often their teachers) can't shake old habits: they peek at one another's answers, fish for clues to a desired response, and scribble with insincerely wrinkled brows.

We also found out that a relatively modest change in the explanation and presentation of our material could



ABOVE:
Our interview in the slums of Rio, Brazil captured the interest of these two ladies at the top of the picture who paused from their housecleaning. A moment before taking this photo, I watched them buffing the shiny wood floor of their dilapidated cement abode, while I stood on their doorstep among stray dogs and puddles of human excrement. The teens, such as this dreadlocked 19-year-old, surprisingly rated car and TV low on the list of desires — family consistently came first.

I think this photo accurately depicts the permeation of the global teen environment by American culture. This Argentine boy's binder displays the very symbol he was asked to identify on the icon sheet. His peers had decorated their workbooks similarly, with glossy cut-outs of sports cars, athletes, rock stars, and, of course, more women.

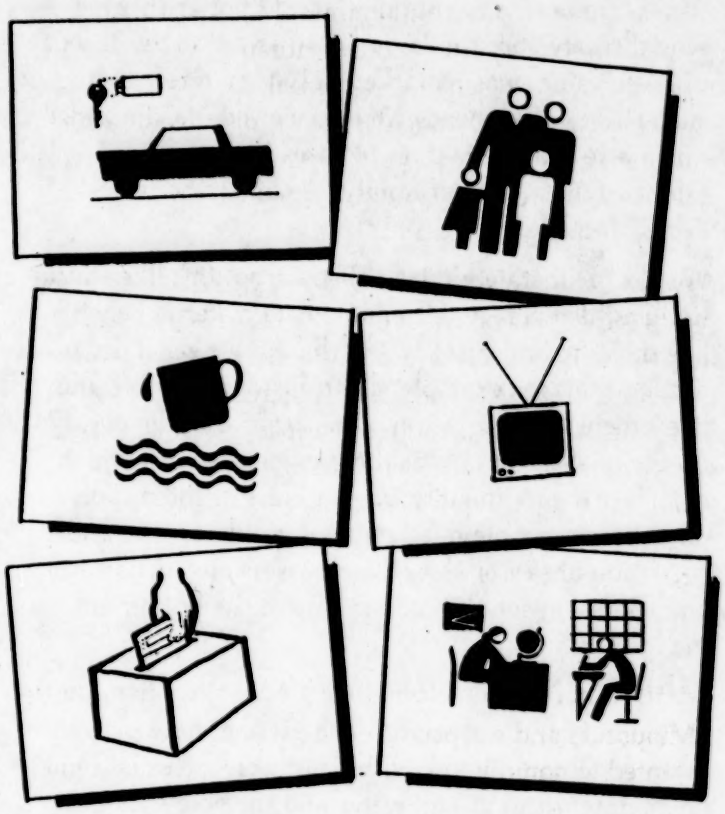
cause a marked shift in the responses obtained. For example, attaching the explanatory term "information" to our flashcard of the television set (see right) immediately brought about an improvement in its overall ranking. Rather late in the trip, we realized that our whole approach was too structured for certain situations. There was not sufficient room for the imaginative subject to create personal hierarchies rather than simply react to a given one.

As we uncovered such weaknesses and oversights, we built corrective alterations into our system. By the last couple of weeks we were able to spot likely subjects, trap them effectively, whip out our visual aids, deliver our standard rap, and pocket the data in thirty minutes flat. We didn't, fortunately, operate at that clip all the time. In fact our ultimate and greatest discovery was that our impact on a neighborhood or community could by itself generate interesting interactions, and that our flashcards and questionnaires sometimes served only to launch free-wheeling, open discussion on vital local issues. So we occasionally went through the motions of interviewing simply to open the field, moving on to really exciting stuff when the pencils were put away. Most of what follows concerns this sort of material — elusive and refractory, provocative and provoking, impossible to graph, entangling and compromising both observer and observed — indubitably human, in short.

Still, we have a core of what we are calling data, most of it from two sources: the Baker-Kelly Visual Values Index and the Teen Chat Questionnaire. Rather spotty, but sometimes provocative results came from a third form, the Icon Probe. ▼

The B-K Visual Values Index:

Arrange these images in order of their importance to you personally.



Kevin and I chose these six images to provide a crude, macro-level tool for determining individual values. We hoped the simplicity of the exercise and the universality of its symbols would minimize problems of translation, both linguistic and cultural.

We were aware of some obvious omissions. Work, a

115	phone
104	communication
14	friends
8	call
6	very expensive/ doesn't work
4	don't know

Coca-Cola

138	drink/soda
11	American imperialism
9	multi-national
6	don't know
5	consumerism

88	red cross
31	hospital
14	don't know
11	help
9	health
7	first aid
4	Switzerland
4	doctor

79	Buddha
36	don't know
35	reflection/meditation
32	religion
15	yoga
6	peace
5	gymnast
3	faith
4	crazies/street person

81	atom
57	don't know
16	science
10	universe
9	future
7	space
6	energy
5	Einstein

93	don't know
36	Islam/Arab world
27	Turkey/Tunisia
16	communism
6	fanaticism

94	US dollar
87	money
22	don't know
7	power
5	imperialism
5	capitalism
4	wealth

92	pyramids
44	Egypt
33	don't know
28	the past
13	desert
10	mystery

68	McDonald's
47	don't know
24	hamburgers
16	junk food
16	food
9	consumerism
7	American imperialism

IBM

98	computers
50	technology
45	don't know
6	progress
5	the future
5	multi-national

145	Christianity
25	religion
23	church
15	God
13	my faith/love
6	cemetery
4	don't know

98	petrol/oil/gas
45	don't know
30	service station
29	shell
6	multi-national
4	industrialization
3	pollution

LEVI'S

118	jeans
62	clothing
26	don't know
5	American imperialism
4	consumerism
3	teen fashion

67	playboy
61	don't know
21	sex
18	women
9	pornography
8	pleasure
7	magazine
4	entertainment

79	Mickey Mouse
27	entertainment
21	Disneyland
21	animation
15	children/laughter
11	don't know
5	fantasy

92	Jewish religion
53	don't know
31	Israel
12	star
9	racism
4	wicked domination

100	don't know
44	radioactive
18	fan
18	careful/danger
10	X-rays/energy

75	UN
60	don't know
30	peace
10	world
10	united world
10	UNICEF
5	world organization
5	lie/mistake/farce

SONY

125	radio/music/TV
24	don't know
20	technology
20	electronics
4	Japan
3	empire

87	traffic light
48	don't know
35	safety/order
11	traffic

primary value to many, is difficult to represent in a general way: what picture could appeal equally to the computer buff, top salesperson, and proud plumber? Religious faith, too, has only specific iconographies (cross, crescent, star, Buddha), and to offer them all would surely confuse the issue. In any case the absence of these values was remarked only very rarely by the subjects. Two skinheads we interviewed in Cambridge noted also that we had no pictures for what they esteemed most — after family — namely booze, drugs, and sex.

We also deliberately mixed abstract notions like education and democracy with immediate material benefits like the auto and clean water, though we generally indicated that, for example, a car meant accessible and convenient transportation. One surprise in the overall results of this survey was the consistency with which, whatever the nationality, sex, or class of the respondent, young people rated intangibles like family and education ahead of immediate possessions. (The auto and television set were commonly at the bottom of the list.)

There is, in fact, something like global agreement on the primary human values.[1] The predominant pattern ranks family at the top, with education the usual (and often close) second, and water and the vote vying for third. Occasionally transportation (auto) or communication (TV) would displace one of the leading four, but only rarely did either rise higher than third.

There were nevertheless some fascinating variations from this pattern. Many people seemed to understand our crude symbol of potable water as a metaphor for a clean environment, and in every country a significant number of subjects put that symbol quickly and firmly at the top of their list. Only water, in fact, shows this combination of third- and fourth-place rankings offset by a consistent, enthusiastic minority who choose it first.

Education, by contrast, runs a very steady, predictable second. Only in India did it mount a serious challenge to the family, and even here water was lapping at the scholar's heels, so to speak, leaving the family at third place on many lists. This unusual order, along with certain other anomalies in the questionnaires from India, suggest that this country's teenagers are subject to some unique pressures.

This concern for pure water does not correlate in any obvious way with such likely variables as the levels of literacy or urbanization or political sophistication in a given region. A class of Thai boys and girls, all between the ages of ten and fourteen, gave water an amazing 17 out of 35 first-place votes. Russian youth likewise often ranked it first or second (the ghost of Chernobyl was surely hovering near). But the most dramatic case, worth presenting in detail, occurred in a remote Masai village, some hundred miles out of Nairobi.

1. We were encouraged to find that our hierarchy of values is (at the top anyway) confirmed by a recent study: Daniel Offer (ed.), *The Teenage World: Adolescents' Self-Image in Ten Countries*, Plenum (New York, 1988), 270 pp.

We had hired a Suzuki four-wheel-drive for this expedition. The vehicle came with a driver, Peter, and a Masai-speaking guide named Ka'ka who led us, via dry riverbeds and cow trails, to his home village. It consisted of a large circle of *bomas*, huts the shape of loaves of bread, made by plastering mud over a frame of thorn boughs. Chickens and calves were penned in adjoining and identical structures.

The inhabitants were mainly women and children, the men having gone off herding or hunting. Most of the women wore sarongs of bright fabric, and elaborate beadwork hung from earlobes stretched into great loops of cartilage. Heads were close-shaven, and the children butted at us, as is their custom, until we laid the hand of greeting on each small, fuzzy dome.

Protocol required that we enter the circle of huts only after certain arrangements were made, and it was the better part of an hour before we sat under a thorn tree before our group of informants: two girls of twelve, a boy somewhat younger, and several mothers — some teenagers themselves — with their various children and infants.

We began, as we normally did, with the six flashcards. Ka'ka's translation of our brief introduction, however, went on and on. Flies swarmed on the eyelids of the babies and the women cooed and whispered among themselves. I interrupted finally to stress that the exercise was simple enough — pick out the most important picture, then the next most important, and so on.

Not so simple, Ka'ka protested. He had to explain what each card meant. Our classroom scene was obscure to the Masai. There were no books here, let alone model globes or charts of the mathematical universe. And certainly no television sets. Conversely, we displayed no pictures of cattle, a symbol of great value for his people, and our stick figure family had, tragically, only two children.

Most of these elaborate clarifications turned out to be irrelevant anyway. In the first place there appeared to be no concept, in Masai land, of interviewing a young person directly. All answers were supplied by the mothers, and all were unanimously agreed upon. Ka'ka signalled me apologetically with hands and eyebrows when I tried to insist on getting the three youngsters to speak to us. The Masai did not apparently grasp the problem. Mothers knew what their children thought, and that was that.

Anyway there was only one answer. Every mother chose the water symbol and spoke emphatically on the subject. It was, I gathered, in a category by itself, beyond all the others. Ka'ka translated for us the story of how each day all the women walked nearly ten miles, round trip, to fetch pots of water from the nearest sump. Eventually I was shown a cup of this wretched stuff, a turbid ochre fluid seething with life. Water was needed each day, by everyone. One could not live without it. There was nothing else in its class.

Indeed. When we finally got through the litanies of praise for good clear springs, and the mothers were

persuaded to make another choice (television — though they thought it was a radio and therefore useful to call for help if anyone got sick from the bad water), they seized the occasion to deliver further speeches on why water was so much more important then even this useful machine. Each choice — transport, democracy, what-have-you — was thrown up against the ultimate liquid asset and found to be far inferior.

Reflecting on other countries (Argentina, Latvia, England) where people seem to take their tap-flow for granted, I wondered if, ironically, these "primitive" tribespeople have shown us the future. Soon after I returned from this trip, the leaders of our Free World attended an "economic summit" where — since they are getting along at the moment and making money too — it was safe to talk about the environment and raise the possibility of actually doing something to improve it eventually. Oh visionary Western Man! We are on the verge of grasping that we surely can live for months, even years, without cars or telephones or libraries or free elections; but if the heavens ever dry up or we foul all the rivers, then we will comprehend the authority of the Masai view most profoundly, at least for the few days that remain to us.

The Chinese Puzzle

Hong Kong was in considerable turmoil on June 6 of this year, two days after the Tiananmen Square massacre. I conducted a number of interviews during a demonstration in front of the press offices of the People's Republic (in a district known as "Happy Valley"). Quite obviously answers were influenced by the emotions running through the crowd. Some young people were in tears, some unable to speak, and some offended that I would ask such inane questions in the wake of so great a tragedy. The flashcards, requiring only a nod or pointed finger to indicate choice, were more frequently tolerated, and instantly revealed a shift of values: most demonstrators picked the ballot box first. Freedom, like water, seems to reveal its true worth only when its sources are threatened. In mainland China, on the other hand, reactions to the vote, or Democracy pure and simple, were all over the map, as was the estimation of water and the family.

To judge by our admittedly scanty sample, the Cantonese are a very contrary, diverse and unpredictable people. My review of recent books would reinforce such a view of most Chinese (Schell's *Discos and Democracy*, Salzman's *Iron and Silk*, Barlow and Lowe's *Teaching China's Lost Generation*).

It is worth recalling that the current generation of young Chinese, apparently fervent in its desire for "democracy" — however vaguely understood — follows only twenty years after the infamous Cultural Revolution, in which youth played an even more influential and certainly more sinister role. In our survey, youths doing the same job only a few feet apart in the market or on a construction job would produce completely different orders of the six cards — sometimes. Then we would encounter a young gang of three or four (especially under 15) who would agree exactly, or claim to. For the first time we found several who preferred a new car to an education or the right to vote, and several who put the family last. ("Too many children already," one young man remarked wryly, in English.)

Most striking of all — and not visible in the statistics — was the social dynamic of our interaction with these small groups. We witnessed, in case after case, an extraordinary interplay between individuals and the group, foreigner and native. Jeff Roush, my guide in Hong Kong and interpreter in China, spoke reasonably fluent Mandarin, so I had access to some of the asides and jokes generated by our presentation. Even without this aid, certain cultural qualities would have been obvious.

In our very first interview, at a funky sidewalk restaurant in Canton, we found it impossible to obtain what we would consider an "individual" response. The waitress we approached summoned a girlfriend from a shop nearby, and the cashier came in too. They considered the problem of the cards together, and began immediately to discuss the pros and cons of each symbol. We repeated our admonition that each must speak for herself, but they ignored us. In seconds bystanders were peering over our shoulder, joining in the discussion or asking to have the whole thing explained from the beginning, or complimenting Jeff on his Mandarin. A man at an adjoining table objected strenuously to seeing the television set slip to fifth place. It meant Free Speech to him, and that was an extremely important thing. He did not have to add how important, at just this moment. The waitress reconsidered and TV vaulted promptly into second position.

Ordinarily we could run our flashcards by three people in about ten minutes, but to do the waitress, cashier, and shopgirl took nearly an hour and exhausted us. At one time there were close to twenty people involved, and we understood that, in spite of smiles and pleasantries, our efforts here would be scrutinized with a new degree of attentiveness.

Mirror Images

In the West Bank, teenagers are also engaged in risky political maneuvers that cast a shadow over the rest of life. In Jerusalem I felt foolish trotting out my little packets of cards and questionnaires; and more than once I caught an exchange of glances that told me I was not alone in this estimation. Still, everyone was polite and cooperative — at least on the surface — and I had no trouble talking to young Palestinian supporters of the intifada (a redundancy) or young Israelis in military training (also a redundancy). Here, invariably, the

subject of "the troubles" worked its way into every interview and colored many responses.

Yet by the standard of our simple six-card system, these bitter enemies resemble each other uncannily. Both follow the dominant global pattern, placing family and education ahead of all else and either clean water or the vote next. They even arrange the cards with the same sober, impersonal dispatch — as if both are used to hurdles, puzzles, spot quizzes, hastily thrown-up barricades. They are all alert, intense, likeable young men and women, anxious to discuss their trouble — the same trouble, from my perspective — but not with each other. They may in fact one day kill each other instead. Our cards, however, do not show us that.

Process and context, then, are as often as not the substance of our survey. A certain image or phrase that seemed peripheral, barely noted at the time, may gradually take on significance and sometimes will yield the key to an unforeseen pattern in our stacks of raw data. Some patterns are still emerging and others shift as we review our forms, photographs and memories from new angles. Readers are invited to experience this magical relativism for themselves, mining the charts and tables for their own insights.

The Teen Chat Questionnaire

Who are your heroes?

What would you like to be doing ten years from now?

Is there anything special about people your age? Does your generation have a new idea? What is it?

What role does your country have in the world?

Does anyone lie to you? Why?

What is the most threatening thing in the world today?

What questions do you want to ask the young people in our country?

I still have doubts about the last question, and found the one probing for ideas on the "specialness" of teens seldom elicited promising replies. We were, in this case, asking our subjects to do our work for us; enough of the right little questions ought to have given insights into that big one.

Nevertheless, most of the questions furnished at least some interesting results, and it may be worthwhile to indicate briefly how we presented the form. We had Spanish, Portuguese, Chinese, Russian, and Arabic versions of the original form, but made extensive use only of the Spanish one. The Chinese translation didn't get into my suitcase before departure, and as it turned out we were better off without it. I left one day after the bloody business in Tiananmen Square, which made it inadvisable to carry any of the trappings of research into that country, and in Hong Kong most kids spoke fluent if slangy English. In Russia, Egypt, and Portugal we were blessed with very able interpreters, so it was usually easier simply to act as scribes and write translations on one of the English forms, noting the subject's nationality, age and sex at the top.

In Kenya, Latvia and Guangzhou, translation was more problematic. A response had to go from Masai to Swahili, Latvian to Russian, or Cantonese to Mandarin before passing into English, and much could be lost or garbled along the way. On occasion we spent an hour or more administering these seven questions, and exhausted the patience of everyone involved.

In certain contexts (Guatemala, rural India), the cumbersome apparatus of interpreters and multiple forms intimidated our subjects and probably distorted many answers. We sometimes bore down on hapless village boys and girls like some governmental investigative commission, flanked by solicitous mayors, schoolmasters, and parents. The quavering replies we received then cannot be very dependable information.

On the other hand, the same machinery introduced a useful dimension into some interviews. We always tried to locate a teenager to act as guide and interpreter, and invariably, working together over two or three days, we came to know these assistants best of all. They were uniformly bright, imaginative and articulate young people, who taught us a lot and clearly enjoyed

RIGHT:
This boy, about 13, is one of the many Egyptian youngsters who operate mobile markets. At literally any hour, vendors like him line the streets, carts piled high with watermelon, cucumber or cactus-fruit. The faces of these youngsters display their understanding that this job is not a summer one, but will be their life's work.

the effort of doing so. If I could bequeath the management of the planet to the cohort of teen angels who guided me through this eccentric journey, I could go carefree to my grave.

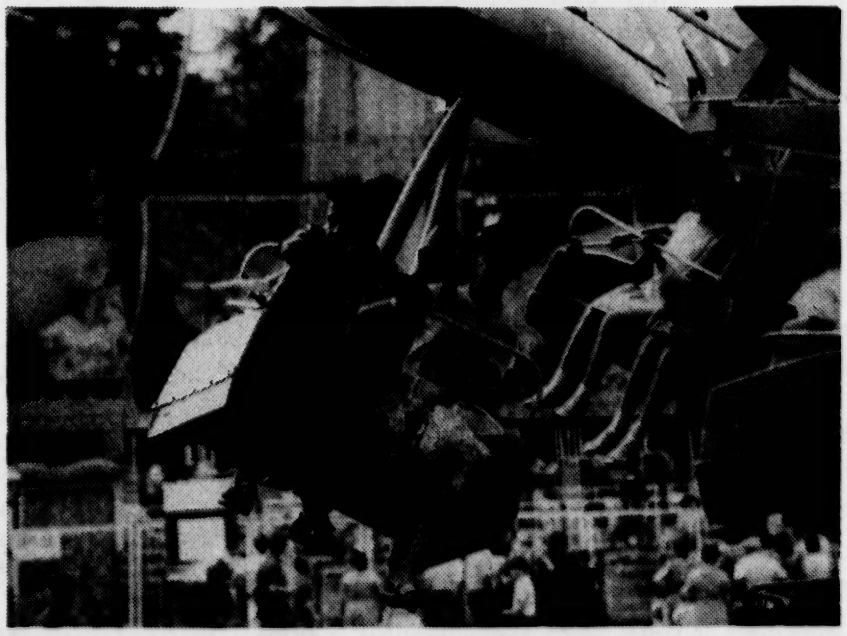
An easy way to demonstrate both consistency and deviation is to discuss each question in turn, with appropriate digressions, proceeding according to the order of our form. Remember that we logged some interviews in very casual circumstances — crowded buses, restaurants, sidewalks, park benches — while others took place in classrooms — a filling-out of forms by forty uniformed youngsters at once. Often we received responses of a single word or phrase, but some subjects bent to their task with enthusiasm, covering front and back of the form. Below, we try to quote as liberally as possible from our respondents, while citing the typical, the insightful, the clever and the perverse.

Who Are Your Heroes?

Our procedure was to define "hero" as any historical, contemporary, fictitious or supernatural being who was "admired and looked up to." We normally gave a range of examples: Christ, Napoleon, Ghandi, Michael Jackson, one's parents, or a name already famous in the annals of the country we happened to be in. We suggested a short list, one to three names.

We can signal a few dominant patterns and set against these some interesting idiosyncracies for each country; and again an account of the *process* reveals nearly as much as the formal responses. Although we certainly did not fashion the questionnaire with specific countries in mind (our early itineraries did not include India, Thailand or Israel), certain questions seemed particularly revelatory in certain regions: they exposed a nerve or blind spot, stimulated attempts at self-justification or evasion.

The reader should begin by looking over Corinne's im-



ABOVE:
This clothes-vendor had just finished a day of selling at the town square of Antigua, Guatemala, the country's capital before the 16th Century. She was nervous about being photographed, but paused from packing up her goods to let me take her picture.

LEFT:
You mean people have fun in the Soviet Union? Don't people just wait in lines all day? I was surprised to find that Gorky Park was not populated by KGB running through bloodstained snow, but was instead teeming with happy Russian youngsters like these kids in an amusement park.

LEFT:
Like many interviewees, these attentive young men in Arrecifes, Argentina, felt special having foreign journalists visit their class, asking their opinions on complex issues. I later interrupted the survey when, as I was trying to take a candid photograph of two boys working, every student instantly rushed from his desk to where I sat so that they too could appear in an American magazine.

Global Teenage Heroes

196	family members/friends	5	John Lennon
83	none	5	Isaac Newton
33	Mahatma Gandhi	5	Hugo Porta
27	King of Thailand	5	Hitler
26	Jesus	5	Eva Peron
20	Maradona	5	Bros
16	Jose de San Martin	4	Nehru
14	Rock stars (misc.)	4	Madonna
14	God	4	James Bond
14	Einstein	4	G. Vilas
13	Mzee Jomo Kenyatta	4	Clint Eastwood
13	Indian film stars	4	Belgrano
12	teacher	3	Sugar Ray Leonard
10	Rajiv Gandhi	3	Spiderman
10	Martin Luther King	3	President Moi
9	Stallone/Rambo	3	Pink Floyd
8	Michael Jackson	3	Pele
8	Tom Cruise	3	Nelson Mandela
7	J.F.K.	3	Mike Tyson
7	Indira Gandhi	3	Juan M. Rosas
6	Zico	3	Indiana Jones
6	Pope	3	Hulk Hogan
6	Abraham Lincoln	3	Bruce Springsteen
5	Superman	3	Bob Marley
5	Ronald Reagan		

pressive compilation, which by itself should prove that if a worldwide youth culture is developing, it certainly has not organized itself around a few personality cults or a common pantheon. Old-fashioned national heroes are strongly represented (Lenin, Gandhi, Bolivar). So are very local and personal figures (grandparents, parents, siblings). There is an expected bloc of contemporary figures who represent active political or social aspirations in certain regions (Yeltsin, Arafat, Thatcher), and a corresponding group of ancient or mythic beings with a claim to timeless worth (Jesus, Buddha).

Still, in most countries, we encountered a significant number who chose popular entertainers, primarily musicians, athletes and film stars. There is no further doubt that Hollywood and rock 'n' roll have penetrated to the furthest corners of the world, and many teenagers admire and envy these wealthy and adored performers often no older than themselves. Amon's Walkman and cassette collection was much appreciated (and fondled) by his counterparts in South America, Asia, and Africa; and a sample of a few bars would usually start an enthusiastic discussion of the music scene.

The motive for this peer worship surely involves the well-known adolescent search for a viable identity. We saw this motive in its primitive form, fittingly enough, on a sidewalk in the Kensington district of London. A group of teenagers, mostly boys dressed in creative rags and disarray, was idling there. Four of them agreed to an interview after warning us that we could be interrupted at any time by the arrival of Matt and Luke.

Matt and Luke turned out to be the core not of the New Testament, but of a group called Bros, currently very hot on the charts. These teens had gathered in front of the manager's office to wait — all day if necessary — to catch a glimpse of their "heroes" entering or leaving. Hardcore fans, our subjects carried blasters to play the newest release, as well as autographed pictures and posters of the divine duo. One teen, a look-alike for Matt, hobbled on crutches. He explained with some pride that a mob of girls had rushed him and broken his leg when they mistook him for the real thing.

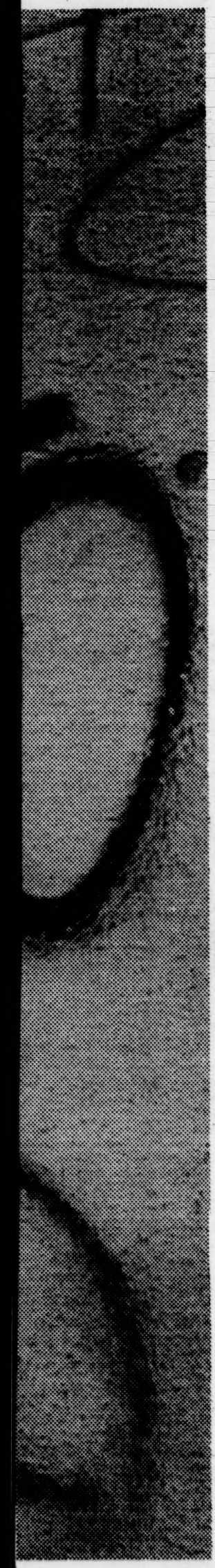
Every response on their questionnaires was turned to some profession of faith in their new idols. What would they be doing in ten years? Working as roadies or publicity agents for Bros. Anything special about their generation? Appreciation for the great music of Bros, of course! Any advice for US teens? Buy Bros's new album! And so forth.

There was something at once humorous and pathetic about this giddy, self-absorbed pursuit. It had a parallel among teenagers in India, yearning to be film stars, and in South America, where even in the universities the kings and queens of soccer and tennis ruled many hearts. These boys already the size of men would one day soon find themselves in sales or soldiering or salad-tossing, engaged to nice girls and saving for a bigger flat or a car, nothing left of their old wild times but a box of cassettes in the closet and a diamond ear stud. But for the present — and only the present seemed to matter — all was focused on the day-to-day, even moment-to-moment doings of the glamorous gods of song.

The need to "be somebody" of course strikes a deep root in the young. We know well how in other ages that need was met by a social structure that assigned role and status, included each soul in a tribe, clan, or divine hierarchy, with its particular privileges and responsibilities. Great folk heroes or mythic beings served as models, gave their names to the newborn. We also know how the vaunted freedom, pluralism, and mobility of the modern world have threatened the old ways, fractured ethnic groups, and made strong identification with such traditional figures much more problematic. To replace such figures we now have the fanzine, the blow-up true-color close-up, the video interview: all provide a spurious sense of immediate and intimate involvement with the star, the dream-self one has adopted; and publicity machines crank out a daily diet of updates and new tidbits to sustain the fans' emotional life.

The other side of the coin is the teenager who asserts (sometimes vigorously) that he or she has no personal heroes, or is him- or herself the only real hero. If "none" is taken not as a category but as the equivalent of any other individual choice, then this answer is far and away the most popular one in England, Israel, Hong Kong, and Argentina. These are countries familiar with modern *angst*, blessed or cursed with a strong tradition of individualism, and they contrast starkly with India and Thailand, where only four subjects (out of more than 200 responses) ventured to deny any faith in heroes.

It seems to me highly likely that even in industrialized and egalitarian states this sceptical view of the use or worth of noble, ideal characters has arisen only very recently, at least among the young. Despite the infamous reduction of man carried out by Copernicus, Darwin, and Freud, and despite a muck-raking frenzy in journalism, history, and literature, the century from 1850 to 1950 produced a plentiful and diverse harvest of heroes. One thinks of "Chinese" Gordon, Florence Nightingale, and Churchill; of Buffalo Bill, Thomas Edison, and Amelia Earhart; of Einstein, Curie, and Lenin. Even a generation ago, one suspects that few teenagers would have been able to resist the likes



of Kennedy, King, De Gaulle, and Ben-Gurion.

Possibly giants no longer stride across this earth, or we find ourselves just now between heroes, but I hold another explanation more probable, one that helps illuminate other intriguing elements of this survey as well. For example, the sheer range and variety of candidates is astonishing, both overall and in particular for places like Thailand and Kenya (where Hitler, Madonna, God and Newton ran about equal).[2] Then one wonders about the prevalence of parents as heroes in South America, and why the English and Russian teens do not see family members in such an ennobling light.

What might account for all these peculiarities: the large number of "entertainment" figures, a significant segment of sceptics without personal models, a tendency in places to revere the family above all, and a tremendous variety of types of hero?

James Bond and Indiana Jones, Hulk Hogan and Joe Montana, Tom Cruise and Bruce Springsteen, Batman and Tiger Masks — these now apparently find themselves at home in Hong Kong or Thailand, offering Eastern youth a veritable smorgasbord of styles and values, from stone killer to lovable clown. What they have in common is that they are *images* rather than people — images that are sold and may in turn sell other images (shoes, soft drinks, automobiles).

Film and television actors are routinely confused with their roles, a reductive and dangerous process that haunts many media stars. Very often such stars represent primarily a "lifestyle," a word which also illustrates a fusion of image and reality, with an attendant replacement of the old notion of moral law by what might be called ethical fashions.

These fashions are remarkably numerous and diverse. Young people now face a blizzard of images representing "alternative lifestyles": the Hunk and the Brain, the Hit Man and the Lucky Nerd, the Top Gun and the Punk Rebel, the Radical Rapper and the Folksy Chanteuse, the Tycoon and the Street Philosopher. Not that Archimedes, Bach, Marx and the Pope have been abandoned. Occasionally they jostle Madonna or Pele on a single questionnaire. But the problem is, again, to account for such profuse variety, and for the sharply contrary views of those who respect only a family member or close friend, or who don't believe in heroes at all.

Erik Erikson has offered an interpretation of adolescence that illuminates our pattern especially well. Each major stage of life, he says, is characterized by a certain virtue (with an emphasis on the old meaning of the word — an animating personal power). That is, the issues that inspire or trouble youth, the causes which they hurl themselves into or anathematize, their often puzzling or disturbing behavior — everything quintessentially "teenage" — has its root in a single quality. For adolescents, Erikson argues, this quality is *fidelity*. The great questions of these years are not then so much "What shall I be?" or "Who am I?," but "What is worth believing in?" and "Whom can I trust?"

Adolescents are jolted powerfully by their first awareness of themselves as creatures bound in time, whose every act creates an irrevocable history (the equivalent of oblivion or even death in the popular phrase "You're *history!*"). But they are simultaneously exhilarated by a new sense of their own power: for the same society which warns and exhorts them also (often in the next breath) tells them "You are the future, everything lies before you, you are young and strong . . . ah! It is the best of life!"

Buffeted by dread and joy, urged by parent, teacher and priest to make the "right" choices and thus enjoy to the full a rare, once-only gift, inundated by potent images of many, often incompatible "lifestyles," the young may indeed be seen at the very deepest level as impelled to find a faith, a point of rest and defense, a touchstone by which they can accept or reject, love or hate, act or not act. They yearn to belong, to join with their peers in some high enterprise, and thus to release the extraordinary passion and energy youth commands — or had better command, lest it turn erratic and self-destructive.

For the power of youthful commitment is incalculable. It is no accident that the young detonate so many great advances and convulsions in human affairs. As Mao put it so simply in his little Red Book: "The young people are the most vital and active force in society." A community can master and control this force only by rallying it behind some banner, a charismatic image or idea; and woe to the society which cannot so charm its young.

The great variety of heroes among teenagers reflects at once their urgent impulse to be faithful, to believe, and the formidable success of the media in manufacturing images which focus and sustain that desire. For our gaggle of Bros fans, to believe was to belong, and to belong was being itself. Matt and Luke, like lovers or gods, gave all meaning and purpose to life.

The opposing group of young people who firmly reject such manufactured images, along with more traditional heroes, are a kind of negative confirmation of that same intense desire to commit oneself. The shadow of all faith-seeking is doubt. The aware seeker rebels against manipulation, demands an object worthy of high passion, or forswears all allegiance. As the young convert is most militant, most anxious to expunge that shadow of uncertainty, so the young skeptic is satisfied with nothing, subjects every icon to a withering scorn. The modern archetype in our culture is Holden Caulfield, who flees an adult world that proves "phoney" at every turn.

Finally, the point is most powerfully expressed by those teenagers who come to believe only in themselves. Campus rebels of the sixties, for example, conceived for themselves a heroic mission: the radical transformation of society. Youth and youth only, they held, had the vision and energy to regenerate a fallen world.

2. Kenyan youths named Hitler a hero four times. One student explained his choice: the Fuhrer started WWII, which preoccupied all the European states and left them too impoverished to continue their colonization and exploitation of Africa; hence, the many peoples of Africa won independence much more easily.

"Never trust anybody over thirty," and "All power to the students," were the slogans of the hour.

It requires, I think, unusual and often traumatic circumstances to generate such a movement. Normally society converts the young to its causes, channels their energies into the usual schemes of survival, salvation, or conquest. But if adolescents find no compelling models around them, if their great yearning to give themselves (and thereby define themselves, as Erikson remarks) is thwarted, then they can become an unpredictable and explosive force.

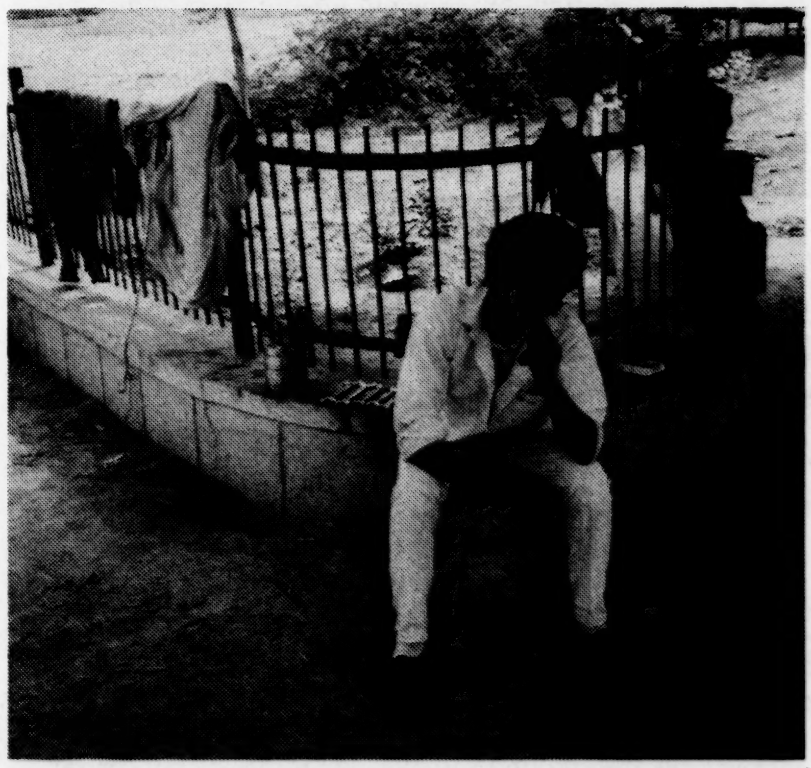
Surely a mindless and ill-organized version of this impulse to fidelity underlies the notorious rioting of young football "loyalists" in England, the "color gangs" in Los Angeles and the vigilante clubs in the USSR. It is also the motive force in the *intifada*, the spontaneous, violent defiance of Israeli rule launched by Palestinian youths in the West Bank. These teenagers, masked and armed only with stones, now appear regularly on the international news. Diplomats at the highest levels confer on strategies for responding to their challenge. They are a major force in the effort to establish a new nation (the Founding Sons?).

To dismiss such youthful protest as the work of "vandals" and "troublemakers" is to misapprehend — or deliberately distort — the styling of their defiance. Surely young street demonstrators risking life and limb in South Africa, the West Bank, China, and South Korea have often calculated and staged their protests as media events. (Some doubtless hurry home to catch themselves on the evening news.) Their headdresses, statues, banners, barricades, and V-signs or raised fists are easily recognizable as the tactics of propaganda and psychological warfare. They are at one stroke self-advertisement and self-sacrifice. Individuals turn themselves into images of an idea (freedom, national identity, a new order), and this idea in turn energizes and focuses individual lives.

A potent and sometimes dangerous circuitry. But perhaps inevitable whenever young people must both unleash and control their special "virtue," in Erikson's sense. For one cannot forget that new causes invariably collide with the old; and young people are usually the chief casualties. Their zeal carries them too easily to martyrdom; they are under the influence of heady stimulants — brand-new faith in brand-new selves — and Aristotle's observation still holds, after more than two thousand years: "All their mistakes are in the direction of doing things excessively and vehemently. . . ." They are capable of trying to face down tanks empty-handed or hurling stones at machine guns. One cannot help adding, however, that of just such mistakes heroes are made.

We found one other, more personal kind of teenage heroism. Several subjects claimed, half jokingly, to be heroes to themselves. Two young men, both poor and uneducated, meant it quite seriously and with unabashed pride.

The first was a husky Quiché Indian, a shoeshine boy

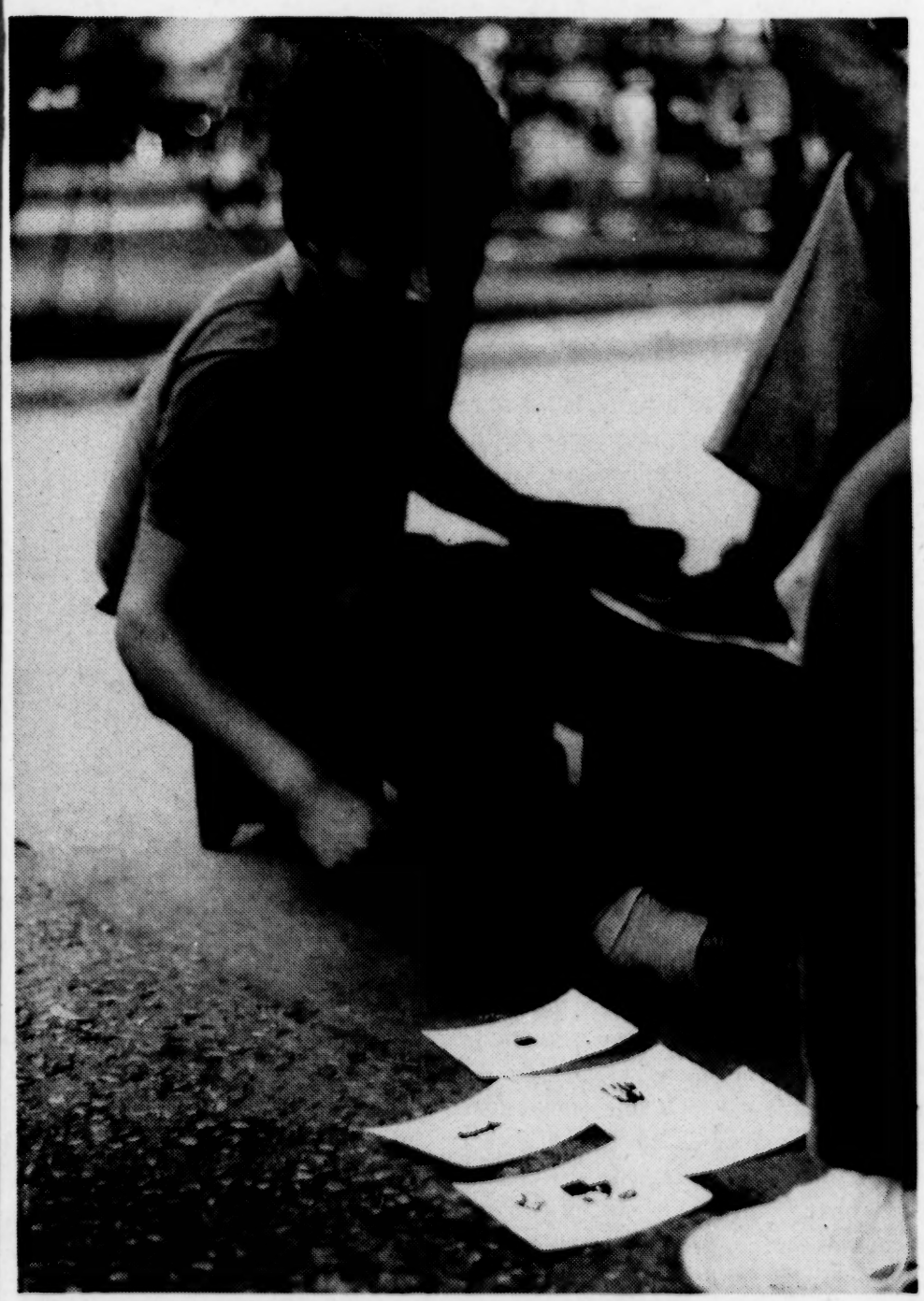


TOP:
At first I marveled at the refreshing universality of athletic competition among teens. But there were also striking differences between this event in Kenya and one that would occur at my high school. Athletes did not wear $100 track shoes, but ran barefoot. The lanes of their "track" were simply distinguished by where the grass had been worn away. And in this high jump there was no two-foot cushion to land on.

ABOVE:
This motorcycle repairman was one of two teens who named themselves as their own heroes (the other is the shoeshiner on the opposite page). His busy "shop" in Agra, India was a shady place on the street next to a soft-drink stand where he fixed motorscooters on the spot.

RIGHT:
In a park in Guatemala City, this hard-working shoeshiner could barely afford to pause from serving his customer to answer our survey. This teen ranked the education and family flashcards high on the scale, but the TV and car were irrelevant — he would never have them, so how could they be considered important?

BELOW:
Great faces. Can you guess where these two guys are from? The fact that they could be from a number of anglo countries illustrates the homogeneity of teen appearance worldwide. I snapped this picture after Will finished an interview with these two in Moscow.



of eighteen whom we approached in a small, dirty park in Guatemala City. We squatted on the sidewalk and offered to pay him and a younger lad the price of two shines in exchange for answers to our questions. The fourteen year-old, however, after a game try at our flashcards, sprang up and fled in a paroxysm of embarrassment.

The older boy laughed and shrugged, explaining that his friend was newly come to the city and had not yet shed his Indian ways. After a glance at our cards he said we could throw out the car and TV. On what he made he could never save enough for such luxuries. The vote, too, was meaningless here.

A customer appeared and our shine boy bent to the task of smearing and buffing, making the rag snap. We slipped in the first question, on heroes, and he laughed again. I am, he said, my hero. We asked how this was so and he told us simply and directly. Six months ago he had been a *borrachón*, a drunk. Completely. His life was nothing. But he had beaten it. He had recovered all on his own. By himself. It was not much, this job, but he had a plan to get better work. It was hard but he was alive, getting by. So I am, he repeated with his wide grin, the hero of this, my life.

When the customer had departed — having grunted approval of his shine, and perhaps the overheard conversation — we worked through the other questions to the last one. Did he have anything to say to North American young people? Well, we could pass on his discovery, if we liked. They could get hold of it, if they tried, their problem with drugs and so on. They could be heroes, too.

Two months later it was another teenage boy plying his trade on a sidewalk in Agra. For two days I had struggled with what I perceived as a maddening evasiveness in Indian youth (see p. 25). It was beastly hot, so my guide and I had descended from the car in search of refreshment and a moment's respite.

Next to the soft-drink stand a boy had set up shop as some kind of mechanic. He sat on one upturned box while another, covered with a greasy cloth, displayed a range of small parts: plugs, solenoids, a distributor cap. On a low, concrete wall behind him he had arranged his wrenches in a perfectly neat row, graduated from the smallest to the largest.

Something in his manner of smoking a cigarette and watching street life drew my attention. On impulse I hailed him and, through the interpreter, began a rapid-fire questioning from memory, with no preliminaries and without form and pencil. Age? Sixteen. Occupation? Mechanic. Heroes? What do you mean, heroes? Great leaders, I suggested. Gandhi, Christ, Presidents and scientists . . .

He hooted, got to his feet, and flicked away the cigarette. "Never got anything from those people," he said. "Never asked, either. They all had it to start with, so what's so great about them? I had to work hard for everything I own, so I'm more of a hero than they are." A couple

of bystanders and the soft drink vendor cheered approvingly.

I plunged on through the questionnaire. In ten years he wanted to have his own shop. For now he was doing okay on the street; people brought their motorscooters to him because he knew how to fix them, all makes. But eventually he would get into cars.

His country was famous for screwing up, but that wasn't his fault, and he couldn't see anything special in his generation. Some had it and some didn't. Lying? Sure, everybody lied. Him too. You could tighten a screw somewhere and solve the whole problem, but you'd make a few rupees if you could find something else that needed replacing.

Threats? A shrug. Take your choice. Plenty of things around to scare you. Nothing particular to say to American kids, though he wished them well.

We returned our bottles to the soft drink stand and thanked the young man before moving back into the merciless sun. He nodded matter-of-factly, amused but not apparently overwhelmed by the duty of representing millions of his peers.

He was the only honest, unpretentious person I met in the whole country. And during the entire trip there were, from my point of view, far too few of these self-reliant skeptics, not nearly enough healthy irreverence. Our samples are all skewed toward a polite English-speaking minority, the Teenocrats, whose predisposition is to ape American culture. Rarely (mainly among the jaded English and angry Argentines) was anyone willing to challenge a white man with a notebook in his hand. But it is at least worth noting that such challenges came from people with dirt under their fingernails and a bag of tools nearby. People who maintain the very quaint belief that anybody who knows his job, works hard, and stays sober can call himself a hero.

What Would You Like To Be Doing Ten Years From Now?

If you are a Muscovite or Thai teenager chances are you know exactly what you want. If you are South American you hesitate to say, so great is the gap between the future you would like and a dreadful reality. To the English (if one is not a Bros fan) the question appears a bit presumptuous, and one tends to deflect it harmlessly ("I don't look forward to the next week, let alone 10 years!"). Indian youth, and many Africans, will mostly become doctors or enter government service, if their dreams come true. The Palestinians will be rambling over the globe on their new passports.

In fact, a great many teenagers from all the countries surveyed would like to travel, especially to the U.S., and not a few foresee declining to return. We heard the song many times, with many variations. From waiters in Egypt, shopgirls in Guatemala, sales clerks in Jerusalem, students in Brazil: we want to see *your* country . . . Things are good there, no? . . . Someone like me, what could they make in California? . . . nothing for us here, you understand . . . and anyway, just to *see* it all . . .

The Japanese may make better cars and cameras and have more money to burn, the Australians may enjoy more room and the Swedes more secure social services, but our results show that aspiring youth still view the U.S. as a land of special opportunities and still yearn to see it for themselves. For better or worse we seem to figure strongly in the future for teenagers everywhere, and many from the poorest and most troubled regions quite simply dream of coming to America to get a new start.

That is a dream already three centuries old, and most other answers to this question similarly only confirmed the obvious. Most teenagers foresee marriage and children, though even in nations where family life is traditionally most esteemed there are some who would prefer to remain childless or single or both. Some women everywhere now think in terms of career as well as family, and show little shyness or hesitation in asserting that position.

The majority aim at high prestige or very secure jobs, though a small group speaks of the personal satisfaction of self-fulfillment. As a Latvian nineteen-year-old put it, "I want to live a life that is not empty." A rare individual speaks of high and generous purpose: "I would like to change the face of the world . . . so that everyone is happy and prosperous" (Old Jerusalem). "Would like to make some contribution to society" (Hong Kong). "Preaching the Gospel all over the world" (Kenya). But for every such altruist there are a dozen whose only standard is "a well-paying job" or "owning a good business" or simply "to be rich."

No one confessed to a crazy, impossible dream — to discover a new planet, a cure for AIDS, or an overlooked tributary of the Amazon. Only one (Kenya) went to the other extreme and aspired simply to be "looking after goats." There was also a notable lack of the sort of impudent facetiousness teenagers were once famous for, even though in many cases the responses were essentially anonymous. No one wrote "Be a colossally successful gangster," or "Make a nuke and hold the world hostage for eighty-seven trillion," or "Live on a desert island with Tom Cruise."

From my perspective, I confirmed a suspicion about my students that had been growing for ten years. They are now predominantly a mature and sober lot. They have been pressured by very large and pervasive forces (the Economy, the Media, the New Militancy in politics and religion) to be cautious, dutiful, and industrious. Life appears too short and too precarious to allow any foolishness or many mistakes. So straight on to grad school. Then the interviews, the job, the marriage, the mortgage, the kids. Or, if it can be done, squeeze in a semester abroad; pick up a little language and widen one's horizons (just enough), preferably for credit. They already *are* where a lot of youngsters would rather be, so they can travel easily, round trip, buying a little experience that will look good on the dossier.

Don't misunderstand me: these are bright, agile kids who work and play hard. And of course now and then they goof off, veg out, or come up with an outrageous prank. But the emaciated, zonked freaks of the early seventies are all gone from our campus, replaced by Nautilus-hardened beef who turn in their papers on time, exactly the minimum length, run from letter-quality printers. They can keep a professor extra hours in the library, making sure he gets to the new books first and devising tests tough enough to bend his charges into a bell shape.

I suppose at some level I was hoping this run around the world would turn up a new consciousness, some teenagers who saw or at least thought they saw, in the brash confidence of naive strength, a way to get somewhere better in the next decade, the last of this millenium. Probably this unrealistic hope stems from my being a new professor back in the sixties, when students were teaching us a lot of things, not all of them healthy but most of them fun. But those days are gone, so far gone it's as if the whole thing never happened. Especially if you are talking to someone born the year Nixon had to quit, who wants to be an airline steward living in a nice house with a nice family in a nice country.

These days it's a tight game for big stakes, professionalism is the word, and all your stats go into the computer. The CEO of the multinational knows it, the terrorist in his hole knows it, and so does any smart sixteen-year-old. The safe plays are the classics: doctor, lawyer, bureaucrat, broker. Disease and antagonism are sure things; so is the human proclivity to put a price on everything and write everything down before forgetting it.

I can only suggest that, by our survey, everyone will be trying for the same jobs, terrific competition, while some other positions are wide open with no applicants. The pay in these latter is admittedly low and erratic, but by the turn of the millenium they should command great prestige. Teenagers might do well to take another look at the washout rates for premed or law school and seriously consider these neglected trades: poet, seer, philosopher, and clown. Starting right now, they could have a very interesting ten years.

Is There Anything Special About People Your Age? Does Your Generation Have A New Idea? What Is It?

The short answer is no, as already suggested by the results from the previous question. At least we encountered no consistent pattern of novelty, no broad self-conscious movements like those that have surged through many societies during the Twentieth Century (Flaming Youth, Wandervogels, Young Turks, Red Guards), most recently the Flower or Love Generation, when for a brief time young people talked of revolution, spiritual as well as political, and banded together around a new kind of music and what were perceived as new ideas of community, peace, and human purpose. Many of the converts to these movements subsequently repudiated them, losing faith either in the dream or in their capacity to realize it. They came to believe their original vision was only the familiar story of naive youthful utopianism, bound to collapse upon contact with an unyielding reality.

Still, many teens insisted to us that they were special . . . somehow. Pressed for details, they sometimes reconsidered and reversed the claim. Even when they did volunteer particular examples of their difference, these "new ideas" sounded tepid and conventional, the familiar youthful notions of a brave new world.

"Greater individualism."

"New styles in clothes."

"More freedom."

"Modern youth very studious."

Indeed, some replies suggest certain subjects did not at all understand the question as we intended it, or had a very modest sense of uniqueness.

"We only talk about sports and family."

"New modes of farming."

"Very destructive/irresponsible."

"Most seventeen year-olds are stupid."

"Condoms."

Our approach betrayed, I think, a hope for a proud consistency of feeling among at least a significant percentage of youth. We yearned to detect the first faultline of a new cleavage, or the beginning swell of the wave of the future. We must have imagined that, given only the cue-word "special," teenagers would intuitively hit upon explanations that would point us to some startling discovery.

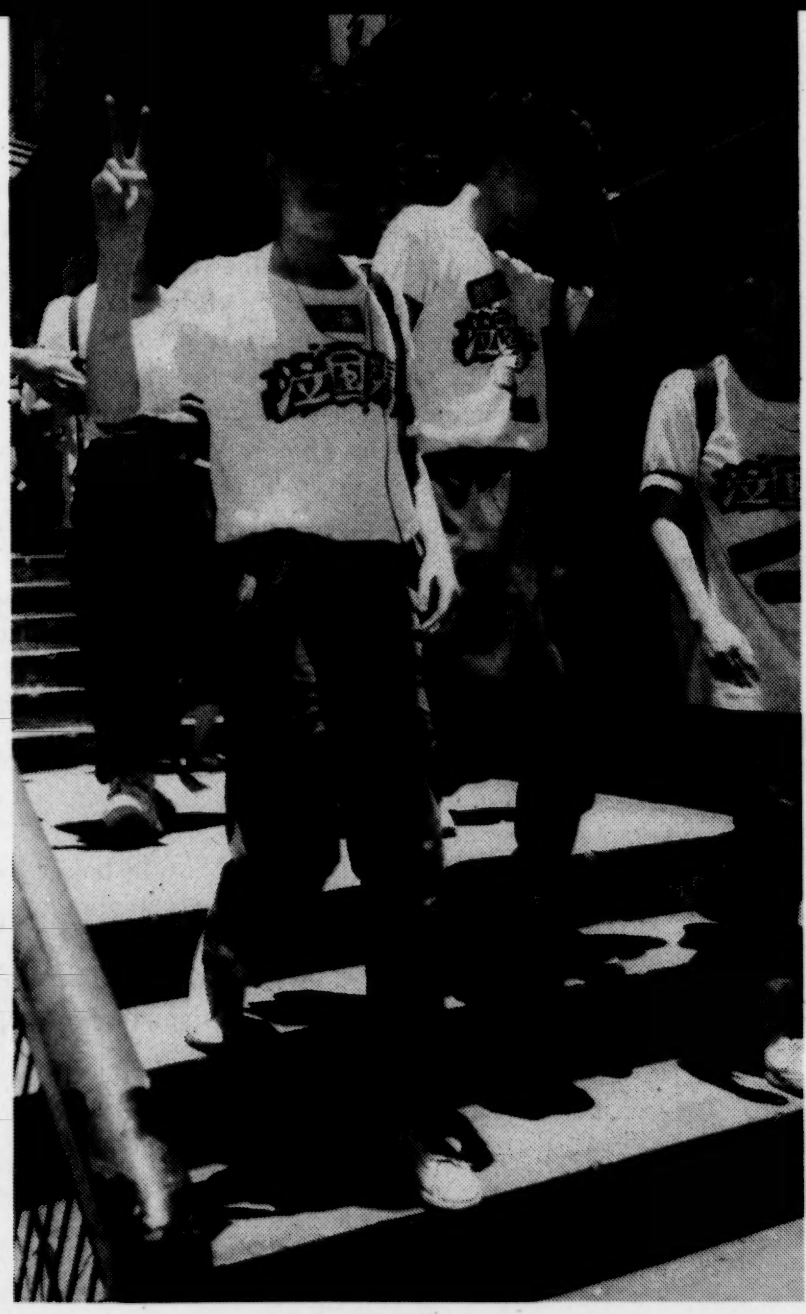
It was not to be. Even in places where teenagers had been captured and thrilled by a cause they did not claim to be a rare and different breed, marked out by God or Fate for a unique role. Latvian respondents expressed a desperate desire to be free; and Chinese youth, before the massacre, demonstrated with an exuberance, daring and commitment that surprised all observers. Yet even here the most aware of our subjects recognized that urgent drives for national liberation, or simply for an outside chance at a better life, are a commonplace of history. They argue only that their generation feels itself at a critical point, that — in contrast to their parents — they are motivated to act decisively.

"We're ordinary. Only we must think of the problems our parents ignored." (Russia)

Or they hope they are so motivated. The Latvians and

RIGHT:
Not very happy in Happy Valley, Hong Kong, protesters march for democracy in China two days after the Tiananmen Square massacre.

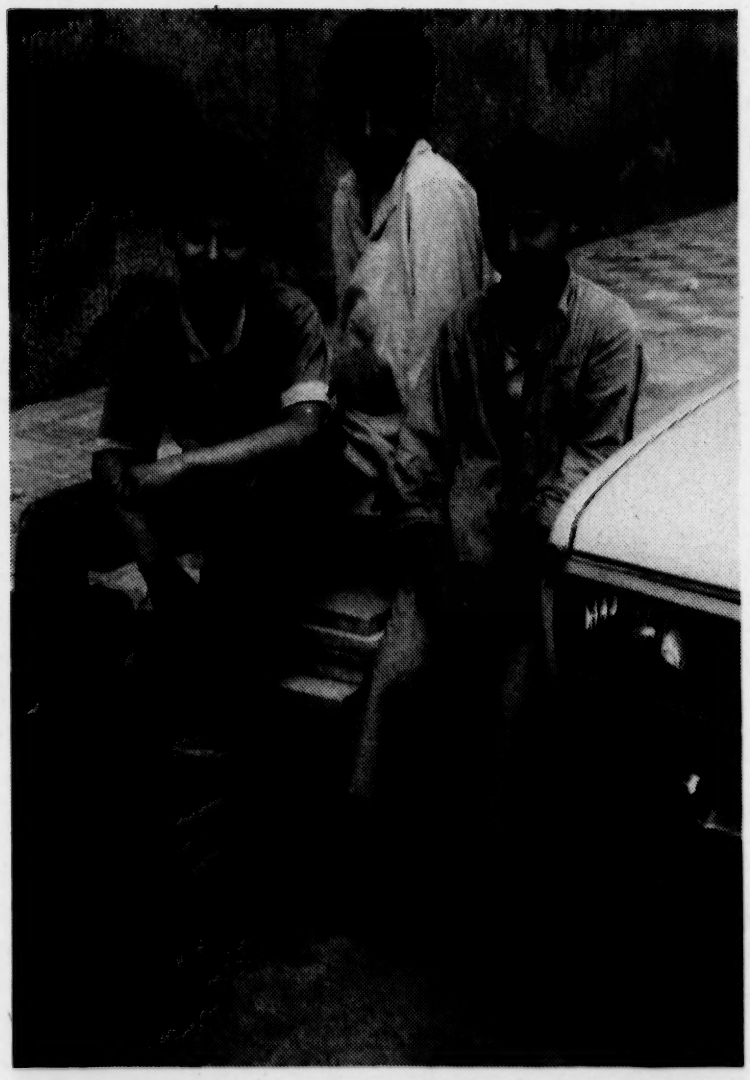
FAR RIGHT:
This flock of pre-teen Kenyans were spectators at a low-budget track meet in a town three hours from Nairobi. Many groups surrounded the perimeter of the track, segregated into three different factions, denoted by the color of the school uniforms they all wore.



ABOVE:
Two young Soviet women (age 16 and 13) calmly answered our questionnaire on a bench in a fantastically manicured Moscow park. Just out of the frame of the picture stood one of the girl's mother and grandmother, watching attentively, unsure of the true intentions of this oddly paired duo of Yankee journalists. The manner of their responses indicated the girls were constantly aware of the elders' presence.

RIGHT
Ali is an 18-year-old bisexual prostitute in the filthy Pyramid town of Giza, Egypt. His favorite customers are American tourists, and he explained (not offered) to me that he gives blow-jobs in the dunes surrounding Egypt's magnificent pyramids for only $5. His sure-fire suggestion for avoiding AIDS is to alternate between male and female clients and "Don't fuck every day." "What will you be doing in ten years?" I asked, "Maybe starting a family or owning a business?" "Beeznis?," he replied incredulously, "I got beeznis — fuck beeznis!"

RIGHT:
These youngsters were repairing a scooter down the street from our hotel in Cairo. I couldn't converse with them, but by my gestures they understood that I wanted to photograph them. I was amazed by the ability of teens, in instances like this, to effortlessly create a beautiful image for my camera. Experience with tourists has taught them exactly what it is we're looking for, and they do not hesitate to provide such images.



young Russians rooting for the success of Gorbachev's reforms talk with mingled apprehension and enthusiasm about their future. The Chinese now sound even more uncertain, and the Palestinians show signs of inordinate stress, despite their brave rhetoric. To be young, in these regions at this time, is definitely not very heavenly. It is to be confused by incessant broadcasts of conflicting propaganda, exploited as cheap labor, targeted or seduced as a "market," educated and exhorted as saviors of one's country, picked up and interrogated, sometimes beaten and shot.

If there is a unique element in this brew, it does not manifest itself as an "idea," at least not one readily and widely articulated by young people themselves. Their dogged sense of being "special" is likewise not identifiable in terms of concrete achievements. What does flicker between the lines is a generalized feeling that the circumstances of modern life are new and dire, that something like a global crisis is underway, and that they — the young — must find some original solutions and the resources to apply them.

I don't mean that any of us has a very clear conception of this modern crisis (as the opacity of the last paragraph suggests), let alone solutions to propose. We are here dealing entirely with hints, hunches, shadows. Nevertheless many young people mentioned the need for or desirability of "individualism," "free thought," "new ideas." Many others speak gloomily enough of their generation's distinctive "desperation" and "incertitude." A common thread runs through these reactions: an underlying sense that old explanations and predictions are not working, that a new kind and level of response is vitally necessary, yet remains unformulated.

For me one incident brings this malaise into final, intense focus. Naturally I saw it on TV, in Hong Kong, a fittingly modern way to acquire meaningful experience. It was part of the television spectacular on the confrontation in Beijing last June. I trust that readers of this magazine will recall the scene.

A column of tanks rolls down Changan Avenue, a barren gray expanse cleared of traffic. Two days earlier similar juggernauts had crushed students encamped around a homemade statue christened the Goddess of Democracy. A thin young man comes into view, marching alone toward and directly in the path of the lead tank. He is Wei Ling Wang, a student at Beijing University, 21 years old. He is wearing a white shirt and carrying a book bag, as if on his way to a lecture. His posture is extremely erect and he is taking rather stiff, exaggeratedly long strides, like those in the children's game *Mother, may I.*

He and the tank come to a halt at the same time, perhaps six giant strides between them. It is clear, somehow, that the young man is not going to move. There is a pause. The image, shot through a telephoto lens, is grainy and we can see nothing of Wei Ling's expression. We must imagine the heavy rumble from the exhausts of the tank column, the distant calls of bystanders.

Finally the lead tank performs a ponderous, lurching right face, moves a few yards and swings left again. But the young man has matched these movements exactly, having to hurry a little. Blocked, the tank rocks to a halt again. Another pause. Then the young man climbs aloft the iron beast and calls to the crew hidden in its belly. A break in the film. A new figure scurries into the frame, and just this frantic sudden motion shifts the perspective, so that as he is hauled away by the newcomer Wei Ling appears much smaller and frailer, tiny and insect-like in relation to the tremendous clanking machine.

It seems to me distinctly possible that Wei Ling and the tank commander were, at the precise moment of their encounter, aware of themselves as actors in a performance. The model here is not, however, the television "show," but ancient religious ceremony (from which, the scholars tell us, drama was originally derived). As Eliade has so well argued, these holy performances, with their chants, masks, and ritual sacrifices, did not simply "represent" or "reenact" a vital mystery; they fused with it, actually *became* the primal experience at the beginning of time.

Similarly, Wei Ling risked his life on June 6 in an unequivocally symbolic act, and in the same gesture established his immortality. There were no rehearsals and there would be no repeat performances — just yet. On tape he exists only as this act, endlessly taking place, forever fixing — for all to see — the meaning and moral of a most important period in his nation's history. Already, in Boston, there are plans for a statue of Wei Ling; already, as a string of electronic signals, he has entered 'sacred time," and there he is invulnerable.

Polyvalence is a quality of myth, and this event could have been discussed with equal relevance in connection with any of our questions. For Wei Ling is already a hero to millions. He also helps define China's current role in the world. And surely he exposes some of the

most threatening aspects of the modern state, as well as certain of the lies which sustain it. And his deed by itself conveys a good deal — more than can be expressed in words — to young people everywhere.

Yet Wei Ling does not fit comfortably in the parameters of our project. He is two years too old, and already a legend. In any case the phrase "global teenager" is too shallow and too profane to contain him. To say he illustrates what is "special" about young people today seems likewise fatuous. His is the kind of mad magnificence that burns through whatever language we use to describe it, that outlasts the causes and conditions that evoked it, that transcends, ultimately, the fragile and finite mortal who manifested it. It is the magnificence of selfless ardor for an ideal, an incandescent concentration of will that can strike through walls of steel. Fidelity again, at white heat.

We do not know Wei Ling's fate. Reliable witnesses say he was arrested only minutes after the confrontation with the tanks. Rumors of his execution are matched by others of an escape. So it is with legends, even in the Age of Information. What we do know is that his act, his stride and his stand, function as symbolic drama, generate mythic power. The substance of that myth, the source of its inspiration, seems to be that the mighty alliance of tyrrany and technology that has oppressed so many in our era has yet one champion — one David with his sling — to fear: passionate youth, declaring its hope in the broad light of day.

SCHOOLGIRLS IN KATHMANDU

What Role Does Your Country Have In The World?

With three notable exceptions, teenagers in the countries on our circuit gave fairly predictable and conventional responses to this query. Students in secondary schools or universities often knew of and cited their country's chief resources. Kenyans, for example, mentioned coffee, tea, and soda ash; the Thais their monuments and tourism, and the Brazilians lumber.

Many also thought of their homelands as exemplary peacemakers. Russian youth was insistent on this point, but almost everywhere a few young people saw their nation in a peaceable and conciliatory stance.

"It has contributed to the world's peace by sending some soldiers to Namibia . . . " (Kenya)

"Peacekeepers." (England)

"My Prime Minister can change the war zone to the trade zone." (Thailand)

One may presume that propagandists throughout the world present every sort of political regime as a leading advocate and defender of "peace." One may also assume that young people are responsive to that message. They fervently hope to enter a stable and harmonious world where their newly discovered talents and enthusiasms may flourish.

In small or troubled third-world countries, however, that hope is often hard to sustain. The forces ranged against this native exuberance of youth exert a constant, inexorable pressure, and the resulting psychic damage is all too apparent. We saw the signs of such damage primarily in Jerusalem, India, and Central and South America. In these regions the deviations from a normal pattern are so extreme they amount to warps into another dimension.

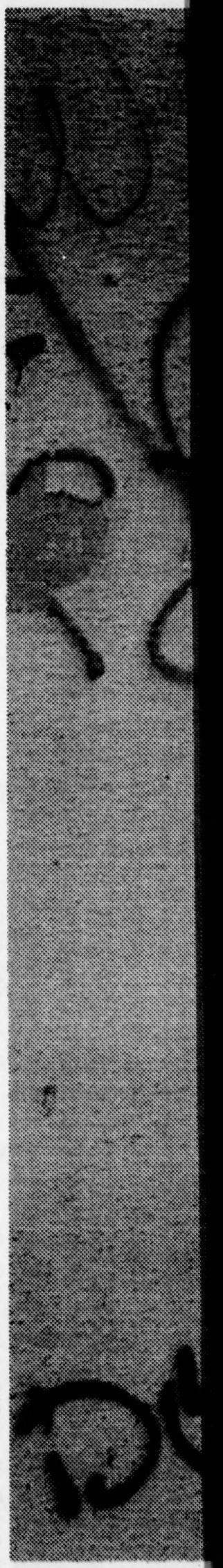
In the case of Palestinian youth (and again there are close parallels to Latvians), this question often brought to the surface a current of anxiety and uncertainty at odds with an overall posture of courage and confidence. Their straightforward answer had to be "We have no country." One respondent, a fourteen year-old boy, then blurted out "I am lost!" Another boy, 17, wrote, "I never had a country of my own and I wish I had one because I know it will have a good and strong role in the world." Yet another seemed to give his answer a positive twist: "My country is not seen by the world now. It is rising in the eyes of foreign people just like the sun." But a line or two later one detects less assuredness. "We have to make it."

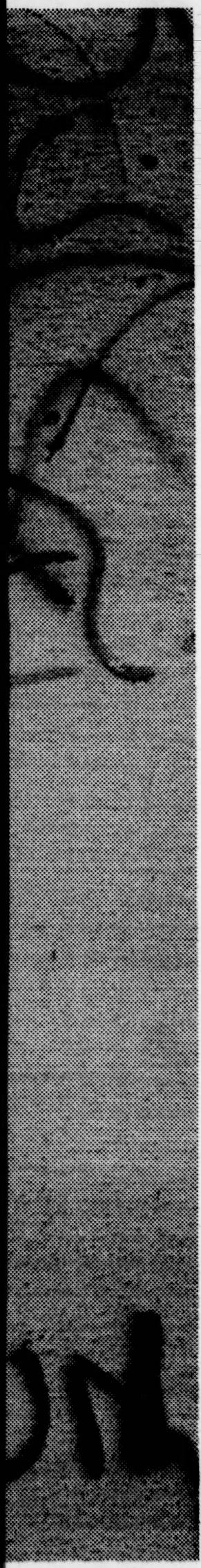
Conversations with young people who have an intensely nationalistic and patriotic feeling, and yet who have no legitimate way of affirming their allegiance, take on an obsessive but oddly circumlocuitous character. One may start out talking about almost anything — the weather, sports, or Madonna's last hit — but inevitably the allusions to "the situation" or "the trouble" crop up.

My impression is that these young people were making a great effort themselves to break away from the dreadful omnipresence of this lack of formal identity. Our Latvian guides, for example, spent several hours each day pumping iron, strenuous, wordless exertion that kept the Problem at (literally) arm's length. They were both giants, muscled from head to toe, their solid physical presence taking the place, perhaps, of the ephemeral abstraction of citizenship.

One Palestinian boy, in a household full of the manic energy of those under seige, cared about nothing except his computer. It was his hero, what he would be doing in ten years, and what made his generation special. Unable to go to school because of the Israeli ban on that subversive activity, not very interested in and probably not very good at throwing rocks, he seemed to be burrowing ever deeper into cyberspace as the only feasible refuge from the horrors all around him.

Again the mirror image reasserted itself, for Israeli teenagers reveal a similar obsessive preoccupation, the same struggle to surmount it. They feel beleaguered, as if their country's role is precarious and "Symbolizes people who have wandered for thousands of years and





suffered, who nevertheless are attacked by the rest of the world."

"Everyone wants it. A democracy in the middle of a primitive Arab world trying to survive."

Similarly, in conversations on the street, Israeli youngsters (with limited success) seem to be trying emphatically to escape from the "situation" and the interminable debate over its handling. Sometimes the context and nature of these conversations is a surreal mixture of the nonchalant and the sinister.

Two nights running, in late June, I hung around Ben Yehuda street off Zion Square in Jerusalem, a district closed to all but foot traffic. A district of outdoor cafes, old-fashioned wrought-iron chairs and marble-topped tables, fashionable boutiques and fern bars. It looks, as an American tourist remarked to me, like a mini-Miami Beach or trendy Soho neighborhood. Tourists, in their shorts, sunglasses and dangling cameras, strolled there; the local *boulevardiers* watched them.

A skinny lad with an earring sat on a sidewalk ice-cream chest, blowing pink bubbles. Tanned youths in University of Arizona and Life's A Bitch tee-shirts were cruising on Walkmans and perhaps something else. Sidewalk craftspeople in hippie garb displayed their wares. For a moment I felt a surge of relief, a slightly guilty delight in this scene of easy-going recreation, normal and familiar even without the English I heard all around.

Then I saw a big gang of teenagers, mostly girls, also completely normal — jogging shoes, logo tee-shirts, jeans and safari shorts — except for one thing. Each and every one had an M-16 slung from the shoulder.

They were talking and laughing animatedly, some licking ice cream cones, others goofing around, arm-in-arm. None looked older than 18 or 19, even with long red nails and eyeshadow. The assault rifles bobbed this way and that, handled as casually as beach bags.

I stopped one of the group and asked why they carried guns. The girl was cheerful and cooperative. They were an officer training group, she said. This was a regular patrol. A boy overheard us and tilted his head at her weapon. "She needs it for killing snakes," he said, and waited a beat for her laughing hoot of protest. "Or Arabs."

Did they mind if I took a picture? Not at all. So I took several of this cluster of healthy, beaming youngsters, determinedly cheerful. Global teenagers out on the town, popping some sweets, strutting their stuff, each armed with a deadly weapon.

The issues of national identity and security, complex and stressful as they are, appear almost clear-cut and manageable beside the problem which haunts some other regions of the world. In the Southern Hemisphere of the Americas, and in Argentina in particular, young people's emotional turmoil over the status of their country reached nearly pathological proportions. The average Thai or Kenyan youth points in pride and without hesitation at his small nation's known virtues or achievements. ("Land of Smile," one Thai boy said simply. "Boxing, Woman," replied another.) But Argentines reacted with a kind of desperate fury of self-denigration, and not a few Brazilians and Guatemalans evinced a similar, if more restrained and ironic, tendency to criticize themselves.

We were fortunate in obtaining a large number of responses in Argentina. Our principal contact there, professor Juan Matsumoto of the University of Buenos Aires, threw open his own classes to our inquiry and helped arrange access to others in secondary chools, some in working-class neighborhoods and others in a small town 100 miles from Buenos Aires. We can assert with some confidence, then, that this pattern of anguished lament is widespread, even epidemic, and it was no surprise that a week after our return and only two weeks after Menem's election, the nation was convulsed by rioting and renewed rumors of military repression.

Here is a quite representative sample of Argentine youth commenting on the place of their nation in the world:

"Very little importance."

"None."

"None. Absolutely outside the world system."

"Not major or decisive."

" . . . Really, sadly weak. We've fallen into a tremendous hole."

"Dependent on the U.S."

"A minimum role, must be restored."

"We influence almost nothing."

"We are on the dark side of the world."

And on and on.

Only occasionally is there a flash of bitter wit, in contrast to the lighter self-mockery of some Brazilians, who found their country notable for "our financial debts" or "supporting foreign banks" or "a big botanical garden in extinction." Though Argentine students ranked among the most alert, astute and expressive of the young people we met, their view of the future is exceptionally bleak, and they manifest an anger and discontent not matched anywhere else.

Almost all Argentine teenagers are hyperconscious of their country's reputation and suffer personally when it is threatened. In other places this question was met with yawns or shrugs, but in Buenos Aires students discussed it passionately. It is true they often spoke of the region's potential, of their determination to help improve the country and restore its position of prosperity and leadership, but even in these more optimistic views there was often a note of urgency verging on desperation.

The same note reverberates in their answers to other questions. In ten years many hope, simply enough, to be able to work at their chosen trade, and not a few foresee emigrating to achieve that goal. The most oft-

mentioned "special" quality of the new generation is uncertainty. Among their lists of heroes one finds a high proportion of authoritarian leaders who sacrificed much for national glory: Napoleon, Hitler, Mussolini, Khadafi, Mao, and of course Perón.

The natural condition of youth is to hope and aspire, to find a worthy task and master it, to locate oneself in a community and give one's best to advance it. To have faith, once again, and in this way to strengthen an identity. But how can faith, especially the new and often frail faith of the young, withstand the iron hammer of the economy, reducing whole nations to rubble or forging others into pavilions of luxury?

For the common shorthand explanation of all major problems in all these countries — we heard it again and again and again — is "the economy." But we need a capital E, and perhaps the entire word should be in red letters. For "the Economy" has replaced Fate and Divine Judgement as the supernatural, mysterious power which determines most lives.

Various societies offer each new generation their version of the origin and meaning of this terrible force, usually attempting to link its operation directly to a political scheme. Thus, to the Marxists, capitalism's own internal contradictions will destroy it, along with cruel injustices so long inflicted on the proletariat and exploited colonies. The capitalist theoreticians, now riding high, prophesy the collapse of all systems which attempt to impose control on the workings of the invisible hand, the free play of "market forces." Others as dissimilar as Muslim fundamentalists and the Deep Ecologists argue that both these competing systems are the product of a fatally flawed anthropo- and egocentric rationalism.

In any case we yankees are, for most of the world, an omnipresent testimonial to both the splendor of the Great Wheel of the Economy and its fundamental, irrational, injustice at the personal level. Travel often brings even the smuggest of us to a sharper awareness of this paradox. Exercising freedom and power with the wave of a plastic card, the tourist nevertheless may understand, finally, how the native's deferential courtesy masks bewilderment and hostility, and how this complex fits, tight as a bulb in its socket, the nagging guilt underlying his own jovial condescension.

The glare thrown off from this connection is uncomfortable to both parties, and they shy from it. Despite their best honest efforts, Latin American teenagers feel inferior (especially in the shadow of the rich, careless, obtuse giant of the North), as if they were somehow responsible for their regional misery. In the case of Argentine and Brazilian youth, this groundless shame is heightened — salt in the wound — by their knowledge of their nations' rich resources — which include themselves as the brains, brawn, and energy necessary for development.

They know their lives *should* be full of promise. In practical terms, development should guarantee them a job, an outlet for their skills, decent wages, goods to buy . . . Yet even this desired future could be ambivalent. Many Brazilian teenagers are acutely aware that prosperity may come at the cost of cutting down the rainforest — an inglorious act in the eyes of the rest of the world and so another occasion for self-torment. And what if the trees are slashed down, the minerals gouged out, the soil squeezed for every peck of corn — and still they remain poor!

On the streets of old Jerusalem, Isreali teenagers stroll through the plaza on a summer night wearing jeans and guns.

The concrete symbol of this situation is the *cambio* booth or sidewalk bank, ubiquitous in every downtown district in Latin America. A stonefaced soldier stands guard with automatic weapon. In the window is a panel listing up-to-the-minute exchange rates. At times a long line of clients develops, their expressions ambiguous, and the flutter and flash of currency gives the head of this serpent green plumage, an ironic echo of continental myth.

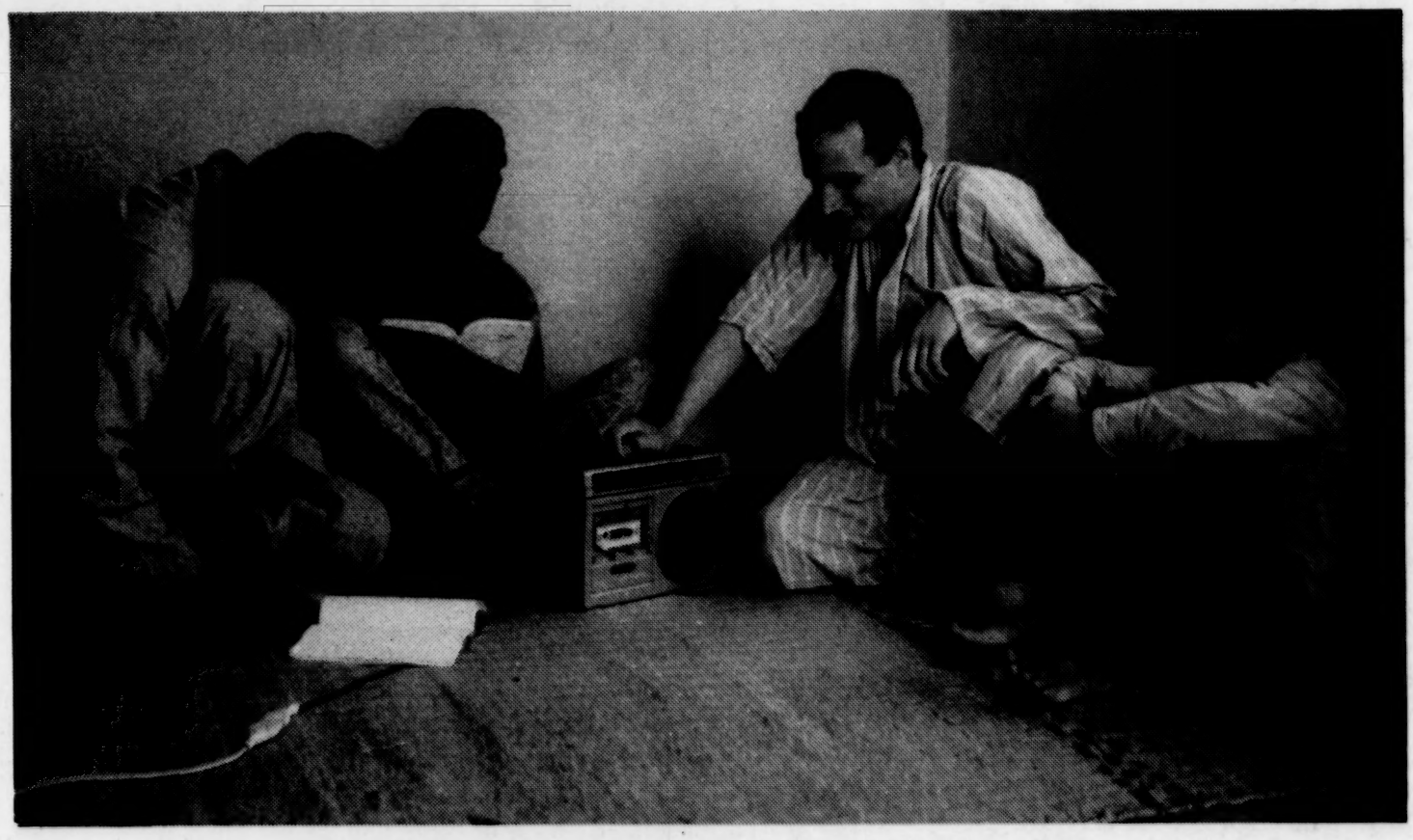
Here is evident the sinister power of the Economy over daily life, the looming presence of "the States," the anguish and shame of a downtrodden populace. For here human labors, hopes, and dreams can be in an instant either redeemed or reduced to mere scraps of paper.

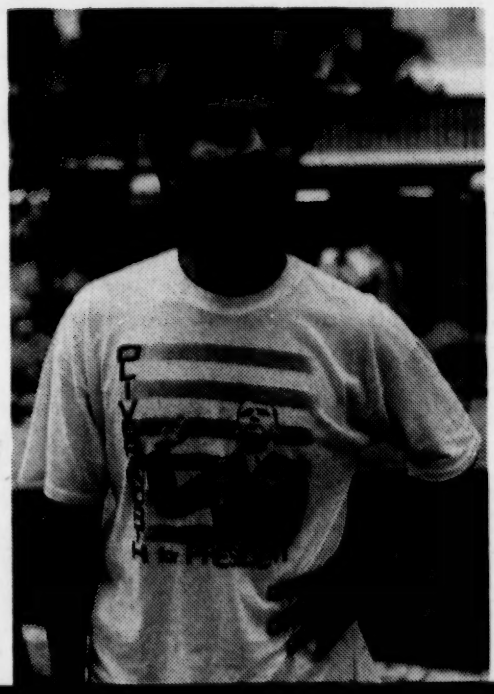
In a taxi coming back from the bus depot (we had spent a long day talking to teenagers in Arrecifes, a small city 150 kilometers from Buenos Aires) our driver told us, his voice a strange blend of anxiety and exhilaration, that the dollar was shooting up. When we left in the morning a buck had purchased 112 *australes;* now, at nine in the evening, it had hit 160 and would rise still higher tomorrow, he was sure.

It was true. The next morning we passed a *cambio* listing a rate of 178 to one. We saw the advantage of cashing some traveller's cheques quickly, before the

LEFT:
We stumbled upon these two neo-nazi skinheads, ages 20 and 23, in the preppie college town of Cambridge, England. The man on the left, wearing the Union Jack, insisted that the job of a skinhead was not to be racist, but simply "payreotic." They nearly laughed at our flashcards representing such mundane and seemingly invaluable objects as education and automobiles. "Why dont'cha ask us what it is we really like?," questioned the patriotic one. Top four on the list: booze, women, drugs and money.

BELOW:
Attiya (touching the stereo), a 21-year-old student who adopted me in Cairo, humbly asked if I would transcribe a song for him. The dying tape player contained a recycled cassette of his favorite singer, Madonna. I strained to decipher the nonsensical lyrics from the scratchy hum of music the tape labored to play. "If you gave me half a chance you'd see . . . my desire burning inside me." "What does this mean?" Attiya asked: "My desire burning inside of me." I tried not to laugh as I explained these ten-cent lyrics. "I think she is wonderful," Attiya said.





RIGHT:
I photographed this young man in Guatemala City two days after Oliver North had been found guilty. I'm not sure whether his "North for President" shirt was created as a joke or not, but this teen clearly understood the facetiousness of the statement. Had he heard, we asked, that North was guilty. Not yet, was the reply. Did we ever doubt that he was a lying crook?

rate fell. Black market or bank made little difference during these surges, professor Matsumoto told us: the two were now outdoing each other, competing fiercely for available dollars.

As we approached the financial district, the crowds grew heavier. Pedestrian traffic had overwhelmed the vehicular, and people jostled and darted like salmon vaulting up a narrow, swift tributary. Through the open doors of banks and exchanges, from which snaked an endless queue, we heard the rustle and slap of currency.

Matsumoto had connections, so we passed through the crowded lobby to a warren of special cashiers at the

rear of the bank. On the way I caught the new magic number sliding onto the board: 194. But by the time the two customers ahead of us had done their deals, and we stood before the young woman peering into her computer screen, she looked up with a little smile and shake of her head to tell us that the rate was falling now, just passing 191.

Still we did well. Our funds had multiplied by more than seventy percent in one day. We rushed out to do some shopping and found the stores jammed, merchants changing and rechanging price tags in a desperate attempt to keep up with the bouncing of this rubber money, customers rifling the shelves, elbowing one another in search of items overlooked and still listed at yesterday's rate. This boiling commerce did not bring smiles to many faces; both shopkeepers and their clients seemed driven, frantic, self-consumed, like passengers on a sinking liner or addicts in search of a fix.

Inflation, the priests call it. A virulence which lurks in the bloodstream of all nations, capable of bringing on these fevers of money-changing and impulse buying. What causes it? Ah, well! The interest rates . . . investor confidence . . . political instability . . . money supply . . . you know — the shrug, the roll of the eyes — the *Economy*.

But however intricate and obscure the workings of this dark mystery, one knows the effects concretely and intimately. In Arrecifes we were welcomed into a trade school for boys 12-15, given a complete inspection tour by the principal and teachers. Bright, busy lads at their workbenches, learning to measure and cut. A few lathes, power saws, and a tiny foundry, all in constant use. The curriculum included biology labs, too, and travel and sex education films. A skilled, broadly educated labor force was being prepared here — exactly what the country needed.

So the teachers were proud of this school, and their students showed us cunning fabrications that were solid proof of careful, professional instruction. But we could not help noticing how old and much-repaired the equipment was, how ancient the few charts and diagrams hanging on the walls, how an anxious whispered conference preceded the firing up of the makeshift forge (a fuel shortage, we guessed).

After our forms were collected, the photos taken, the staff gathered around to chat more informally. They were gracious, considerate hosts, plainly dedicated to their craft, but here again fell the long shadow of the Awful Mystery. They could not resist, at the cost of a wince, asking the value of Amon's camera. Nor could we refrain, with an apologetic duck of the head, wondering about the salary scale at this school.

No doubt we all made the same rapid calculation. The fine Japanese optics slung debonairly from our homegrown global teen would handily pay two teachers for a year's work. And you — a man turned to me, his eyes haunted, searching — you make . . . ? I could not dodge; these people were too honest and aware. I coughed it out. I was worth twenty-five of them.

And then it all spilled. There was essentially no budget at all for operation and maintenance. Some of them bought paper for their own students, and parents donated or staged benefits to buy chalk, staples, wax for the floors. Volunteer work teams repaired gutters, roof, playground. Nobody made enough to live on, actually, up to and including the principal. They worked very hard — the signs of that were everywhere — but things never seemed to improve. They smiled with the ironic generosity of spirit cultivated by those whose only dependable capital is honor. And they hoped, and hoped, and hoped, because there was nothing else to do.

Scenes like this one occurred in many countries. In Guatemala a teacher makes even less and may moonlight as guide, translator, or even waiter. In Egypt, our hotel clerk had a master's degree, and more than one taxi driver boasted part or all of a university education. In Africa even the street vendors have had classes in political economy.

These people are now absorbing one simple lesson in the famous School of Hard Knocks: Scrimp, Scam and Claw are the subtext of those glossy World Bank and United Nations reports, national programs for development, and their accompanying priestly disquisitions on debt, currency, growth rates, etc.

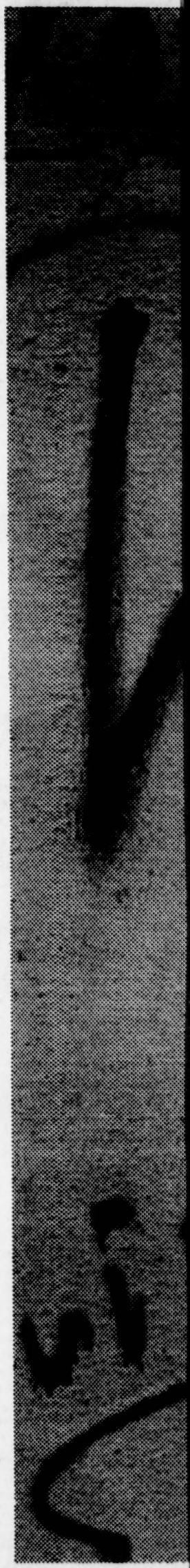
The young are signed up for the most intensive course, a crash course. Just coming on the labor market, heads stuffed with images of affluence, they find out quickly enough their value to society. They are the most unemployed class in the world, also the worst paid and least protected. They are offered the most boring, filthy, dangerous and demeaning jobs available. In the language of one of those UN reports:

"The key words in the experience of young people in the coming decade are going to be: 'scarcity,' 'unemployment,' 'underemployment,' 'ill-employment,' 'anxiety,' 'defensiveness,' 'pragmatism,' and even 'subsistence' and 'survival' itself."[3]

Fabulously rich by Latin American standards, also handsome and sunny of temperament, Amon had no problem finding dates among the students who clustered around after our survey work. He can be excused a certain hot-dog enthusiasm at the outset, for we agreed, the fresh eye of youth and the mature judge, that Brazilian and Argentine women are uncommonly striking. But when he got back at 3 a.m. from the disco in Buenos Aires, though he escorted not one, not two, but three *fantasticas*, his expression was pensive, a touch wry. He was not in the mood for avuncular jests about his score for the night.

The disco, he said, was a huge, plain black box, full of identical, jerking puppets under strobe lights. Everybody in the same spasm, dressed in black. Screeching heavy metal.

Then one of the girls told him she worked at the downtown McDonald's, flipping burgers and stuffing fries. We had seen the arches, checked out the place; it had



3. *Youth in the Eighties*, Unesco Press (Lausanne, 1981), p. 17.

pretentions to elegance — neon, glass, potted plants and very crisp uniforms. This girl, Amon said in a tone of pained wonder, got paid the equivalent of eighteen cents an hour. It stayed on his mind, weighed on his mind, preyed on his mind. Eighteen cents an hour.

And then a final intimacy, a real engaging of emotion. This girl asked him, hesitantly, if this — the din and flash and jerk — was *the way they did it in the States?*

"What could I say?" There it was, that same shadow haunting Amon's eyes. *The Economy.*

We gave each other a particular grimace that was beginning to telegraph things we couldn't or didn't have time or energy to say.

The Global Teenager. Sure. She's that bright pretty young university student whose future is serving you hamburgers at McDonald's for eighteen cents an hour.

Ugandan wooden bicycle

Does Anyone Lie To You? Why?

We expected great things from this (we thought) clever question. After all, adolescence takes place in a peculiar riptide: the last gullibility of childhood struggles with a new awareness, clear-eyed and often angry, of the shams and poses of adult life. One might have assumed also that the deluge of information and propaganda now disseminated at the speed of light would render the "truth" ever more unstable and tenuous, and that contemporary youth — the first generation to be saturated from birth in cool media — might come up with interesting speculations on this version of reality.

Instead we have mostly confirmed commonplace intuitions, and our own emerging profile of youth throughout the world. Two out of three believe others lie to them, and many think prevarication is endemic to humans. The most common culprits are on the one hand friends and family, and on the other, the press and politicians. As expected, falsehoods spun by intimates are often seen as benign or motivated by a desire to save face, while public figures or institutions appear to lie for personal gain — money and power.

These facts may indicate a predominant skepticism among young people, but given the frequency of news stories worldwide on corruption, coverups, and deliberate disinformation, they are surely reacting reasonably. Their views probably reflect those of society at large. The exaggerated or spurious claim is now a staple of advertising. (Bald-faced admission of this fact is the key to Joe Isuzu's perverse "veracity.")

Similarly, the modern political machine has so perfected techniques of evasion, implied denial, and euphemism that the public accepts deception as normal, and a candidate who abjures this rhetoric or handles it badly is considered naive or incompetent. Polls taken at the end of Ronald Reagan's presidency showed that although nearly two-thirds of the citizenry approved his handling of the highest office in the land, less than half believed he was telling the truth about the worst scandal of his career.

This broad pattern of skepticism accords well with the results of previous questions. It is difficult to cast the con man or barker as hero, and the shifty idioms of flattery and obfuscation are about as new and unique as the Garden of Eden. Even the impenetrably complex mystery of the Economy may discourage any faith in accurate analysis and dependable solutions.

An interesting abberation from this pattern occurs in India, and teenagers in the USSR demonstrate an intense and elaborate relationship with "truth" that carries us into the next question. In both cases we must overlook, or look beyond, the actual responses. The material we were fishing for, quick and subtle substance, always dodged so obvious a bait.

India's oddity at least appears as a silhouette in the data. No other spot produced anything like so many claims to truthfulness — more than half the respondents insisted that no one lied to them (the normal rate was perhaps one in ten). I say "insisted" because I spotted this configuration early on, and began to press for reconsideration of the question. Are you *sure,* I would ask. *No one?* Over and over a definitive shake of the head, a demure smile. Everybody here tells the truth.

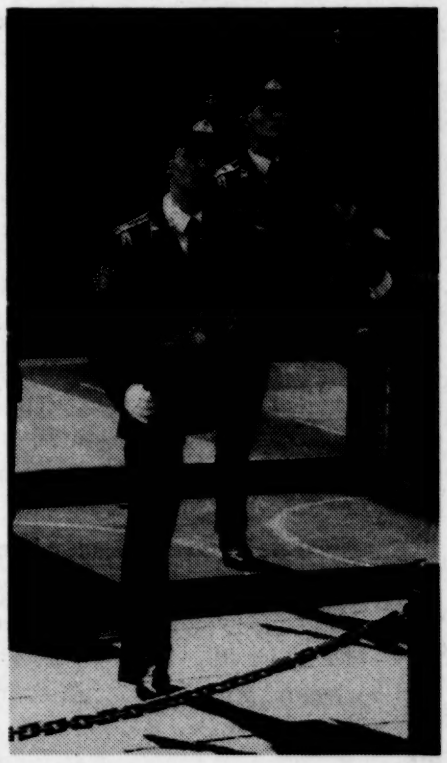
They were lying, I think, at least to themselves. I suspect further that some form of self-deception is a practical necessity for survival in India. There is something slightly bogus about the whole country, a disparity between the glitter and perfume of appearance and an odoriferous, shabby underlying reality. The major Indian religions, of course, founded themselves exactly on this principal of illusory appearance (the doctrine of Maya); and many observers have been struck by the endless contradictions in this civilization — the ascetic doctrines taught in opulent temples, abjectly poor people addicted to an absurdly sentimental and romantic cinema, a rigid caste system in the world's largest democracy, and so on.

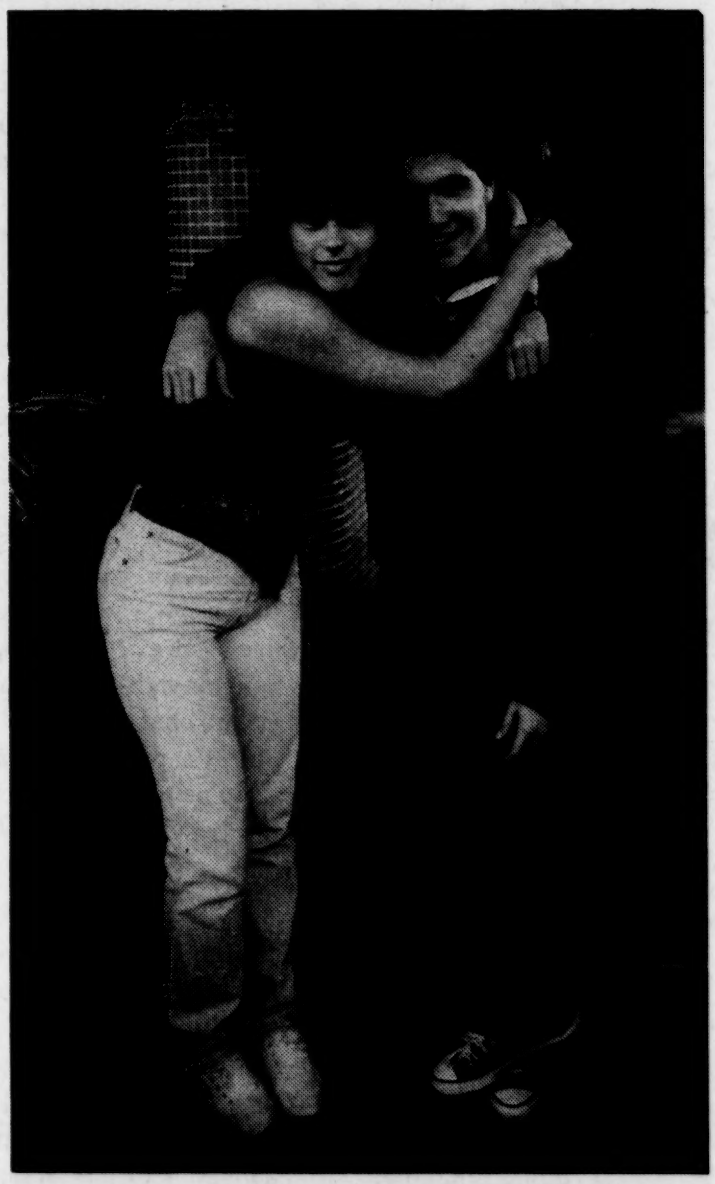
In some cases Indian youngsters told me this lie about no lies under circumstances which clearly justified such a move. Parents loomed over too many interviews, or flitted about in the background; and my chief interpreter had an incurable habit of paternal cajolery, subtly coercive. More than once situations slipped completely out of control: a young woman would be sent for, installed in a chair opposite me in her best dress, and told in no uncertain terms to cooperate; then her father would lurk in the doorway, watching my face to see if I was pleased at her answers. Or a whole group of village boys would be summoned to the mayor's courtyard, where he would preside over the interview, his hooka burbling ominously during strained pauses.

Other unique variations in our material also point to the family as an area of great turbulence in the subcontinent. Only India and Kenya ranked education and clean water ahead of the family, and India did so by the most decisive margin. Even more arresting was a unique response to the sixth question ("What is the most threatening thing in the world today?") The second most common reply (in a tie with earthquake and flood) was "mummy and daddy."

The first time a fifteen year-old girl made this assertion, with an embarrassed laugh, I assumed it was a joke. But others, on different days in very different locations, assigned their parents the same sinister distinction. Two young people also volunteered the information that they commonly lied to mummy and daddy out of fear. This admission makes explicit the link between illusion and domestic harmony, a connection which I suspect is at the heart of Indian society.

Consider, for example, the traffic and sanitation in and around New Delhi. I have never seen more reckless driving, more dangerous railroad crossings, a greater number of recent wrecks — some with bloodstains still fresh on the pavement — per mile. Nor have I ever witnessed so much excrement in public thoroughfares and waterways. Shit is, literally, everywhere.





CLOCKWISE FROM TOP: "Can I take your picture?" I asked this 17-year-old flower vendor in Nairobi. "Give me twenty shillings ($1)," he responded without missing a beat. "Twenty shillings?!" I said, "Why should I pay you to take your picture." "Because I'm beautiful!" he laughed. Notice how his love of money is reflected in his attire; his shirt is patterned with $100 bills.

Near Delhi, India, schoolgirls take time to answer the questionnaire. Each wanted to marry and become a civil-service bureaucrat.

Rock groupies! They do still exist, Will and I realized upon encountering these two, camped outside the office of their favorite band Bros (pronounced "brawss"). Their responses to every question somehow incorporated their unyielding devotion to this teen rock band. "In ten years I'll be working for Bros.," "I want to tell American teens to listen to Bros." etc., etc.

These two high-school seniors were our guides through the slums of Rio. They are students at an English-language Catholic school in Rio de Janeiro. The girl, 17-year-old Flavia, remarked how thrilled she was to have the opportunity to translate for us. "It's just what I want to do in my life — be a reporter." The young man in the photograph, whose name I've forgotten, was embarrassed by the intimate pose his friend struck.

Young men are conscripted into military service in the Soviet Union at the age of 19. The guard in the foreground of Lenin's tomb at Red Square is probably a first-year recruit.

Much of this offal falls from the cattle, goats, elephants and chickens that also ramble freely on major highways, along with new hybrid vehicles, patched up from various ancestors, that scatter their own gasses, fluids and solid debris behind them. Sheer anarchy is avoided (only just), by assigning right-of-way to the larger, faster missiles, those least under control. Yet young people describe India's role as one of "unity" and "progress," or "greater mechanization," and "machine manufacture." They demonstrate an unflagging optimism, a belief in an improving standard of living, the steady advance of their "golden country."

Or consider the preposterous world projected by Indian films. All the protagonists are beautiful and lead exciting lives (as writers, doctors, executives, models, actresses, dancers, queens) governed largely by marvelous coincidence. The villains who threaten these glorious personnages are dastardly blackguards o'erwhelmed in the end only by a lucky combination of superhuman strength, incredible deftness, dazzling beauty, and a fortunately overlooked matchbook cover or a safe combination delivered in the nick of time by carrier pigeon.

Teenagers (along with the rest of the country) gobble up these absurd stories and adore the stars who play them out. A third of our respondents named film stars as heroes — an impressive figure if we remember that only the illustrious Gandhi family (taken all together) drew more votes. Yet a majority of the same young people hope to be employed, ten years from now, in "government service." Even a cursory acquaintance with Indian officialdom will establish that these youngsters must be yearning for the blandest, grayest, least thrilling career imaginable.

The fact is that Indian culture is still sustained by two absolutely opposed, uneasily balanced forces: imagination — feckless, gorgeous, and active far beyond the range normal for the West — and cunning, a precise calculation of self-interest. The usual structure of these attributes places the former on the surface, as shield or insulation, and the latter within, as ultimate engine. But health and stability, both national and individual, depend on keeping these forces strictly apart. The whole aim of western psychology — the integration of personality, recognition and resolution of conflicts among elements of a self — is irrelevant, if not downright dangerous, to the Indian psyche.

Visitors who approach this land in a mood of cold rationalism, with an eye on statistical evidence — per capita income, homicide rates, ag production — may be properly shocked. They will perceive the local strategy for survival as one of denial, self-deception or plain hypocrisy. And those who only pass through gazing at monuments and shopping for trinkets will not recognize the true strength of the little shopkeeper who advertises his wares as "World-Famed! Guarantee by University Expert!" or the bureaucrat who knots his tie carefully, swings his umbrella with a certain masterful ease, and whistles aggressively on his way to an office job that would have driven Kafka mad in a week.

The teenagers we talked to mirror these inspiring, or maddening, qualities. They lied to us only in the sense they lied to themselves, which in their view of the world was no lie at all, but merely the necessary amalgam of imagination and the imperative to survive. They really do see themselves as a great, free, prospering people, following a strong and sure leader into a promising future. And so seen, with youth's fervent impulse toward faith, India can struggle on, actually becoming — at least on the silver screen of the national consciousness — this vision, evoked magically by gesture and pose alone.

At the same time, the young allow this illusion to carry them only so far. Without bitterness or revulsion, they prepare for the gritty exigencies of life in an exhausted, overcrowded, underdeveloped land. Education first, for

them: a ticket to "government service" and its tiny but regular paychecks; also an escape, finally, from mummy and daddy.

They will have the satisfaction of maturing in a country that is never — whatever else one may think about it — dull. In India the stuff of legend is still woven into the texture of daily life. One day the Delhi papers carried the tale of a gang of laborers digging a ditch on a suburban estate. They unearthed a buried treasure, hundreds of thousands of ruppees worth of gold coins, jewelry, and plate. Unfortunately they dropped their shovels and hurried away to begin quarreling over it, thus provoking the landowner's suspicion and bringing in police to point the moral in another parable of greed.

The next day the *Sunday Observer* featured the lurid tale of a certain Veer Vikram Singh, a *dacoit* (robber baron) accused of terrorizing a whole sub-province. Arraigned on 21 counts of rape, murder, and extortion, Singh allegedly fed victims to his four pet crocodiles, tortured others with scorpions, and used a python to coerce village girls into recognizing his *droit de seigneur.*

There are teenagers ready for the likes of Vikram Singh, however. Interviewing a series of subjects in a home in Agra, I looked up to find a very small young lady perched on the chair of interrogation. She had very large black eyes and very white teeth which she had concentrated expressively on me, ignoring the interpreter.

"Tell her we are talking to people over twelve," I began gently, "so though I appreciate — "

"I am thirteen!" she beamed. "And I can speak English very good. So why not let us begin?"

I laughed, shrugged at the interpreter, and spread out the flashcards. "Choose the most important — "

"Education!" she burst out. "Then family water democracy television and automobile!"

She had been, surely, listening at the doorway to the girls ahead of her and so had prepared all her choices in advance. Making my notes, I joshed her about this tactic. Oh no, no, she protested. She may have overheard a bit but she did not prepare . . . exactly. Only thought about it. So did I want to hear about her heroes?

Bright as a new penny, quick as a mongoose, she could scarcely contain her huge delight in the whole situation. Her feet did not reach the floor and she might have weighed sixty pounds soaking wet, but she had more self-possession than I had yet seen among her half-billion countrypersons.

"What would you like to be doing — "

"A police inspector!" she cried happily. "Murders will be my specialty department!"

She meant it, too, with every gram of her ardent being backed by her nation's centuries-old tradition of fantastic dreaming. The curmudgeon analyst in me took flight. Perhaps — at least perhaps — she would do it. In the *Upanishads* there are many things stranger than a woman warrior. And who better, to catch a monster, than an elf?

What Is The Most Threatening Thing In the World Today?

Poring diligently over her tabulations of our completed forms, blessedly unaware of the slapdash manner in which many of these were obtained, Corinne was the first to spot some important trends and connections. One of her notes to me links this question and the previous one in an intriguing way:

"In looking through all the responses to "Who lies to you and why?" and "What's the most threatening thing in the world?" I noticed a significant number of responses on the psychological level — showing some insight into the motives and inner workings of others. The recognition of the imperfections of human nature and the need to take that into account was prevalent in a number of responses to what is most threatening — misunderstandings between people, excessive pride, etc. There were *no* responses that listed an outside enemy (the Russians, the U.S.) as the villain, although some did list the dynamics between the superpowers as a threat. In terms of the future — this is hopeful, showing a tendency away from us-them thinking and making the win-win style of working things out possible."

I agree that the absence of us-them thinking is encouraging, and so is the effort to see into the psychological underpinnings of conflict, which often involve kinds of subterfuge and delusion. The interplay between these two issues is so fascinating a field of inquiry that I devote most of this chapter to it. My conclusions are not as sanguine as Corinne's, primarily because I came to feel that the diminishing threat of nuclear confrontation, apparently a function of the discrediting of communist dogma, has not been accompanied by a real movement toward magnanimity and compassion, or a recognition of our complicity in misunderstanding.

First a few general if obvious conclusions and a word or two of clarification. The threat of war between the superpowers still ranks first among young people, and surely it is a real and serious danger. Nevertheless, many respondents cited this danger so routinely and matter-of-factly that one may doubt they are much preoccupied by it.

The possibility of environmental disaster clearly looms larger these days, and consitutes for many a much more visible, immediate threat. AIDS and drugs likewise have made their malign presence known and widely feared.

We might note that these threats seem to lessen as one moves down the socio-economic scale. A young Guatemalan farmer laughed at the notion of fearing nuclear annihilation, when his family dealt with hunger daily. A teenaged English beggar agreed with him. A Bra-

zilian thief said ruefully that only the police scared him, since they had recently adopted the gringo policy of opening fire on fleeing suspects. The Masai women promptly said that lions were the direst threat to them and theirs. Had our survey included more such subjects, concerns over "the tensions between the superpowers" would surely have receded further.

Finally, a note on those who feared sharks, tigers, snakes and ghosts. These were mostly pre- or borderline teens — a class of 11-14 year-olds in Bangkok. I assume these scary animals and spirits came mostly from folk tales and story books, and will one day soon hump off into the thickets of nostalgic childhood memory. Still, we may have turned up something unique to Thailand. If so, I must leave to those trained in cross-cultural psychology the chore of figuring it out.

Since we yet live in a "bipolar world" in Paul Kennedy's phrase,[4] our main focus is on that highly charged field of psychological forces between ourselves and the Russians. These forces have a way of bending all our perceptions, of calling into question — at least for the introspective — the very nature of truth. That fact, for me, gave a whole new twist to "the Russian threat."

If Indian youth survives by overlooking the obvious paradoxes of society in a kind of blithe, mass schizophrenia, Russian teenagers are galvanized into a furious, melancholic awareness of the pretensions and evasions that characterize their nation, and also, sometimes, into a classic nihilism or zeal for reform.

We may risk such generalizations because, for the first time since the Bolshevik Revolution, the Soviet Union has opened itself deliberately to analysis and criticism. Commentators from all over the world, fascinated by the complex turbulence of the Gorbachev period, have produced a clamor of information and opinion almost orgiastic in character.

So we know now as a matter of record that an underground rock music culture, often subversively satiric, has existed for almost twenty years behind the Iron Curtain, that many *Afgantsi* returned from an unpopular war full of bitterness and anger, much like the American GIs who suffered from their experience in Viet Nam, that official revisionists are re-examining even the most sacred tenets of Marx and Lenin in the hope of recovering economic vigor, that some young Soviets can and are openly advocating disarmament while others are forming neo-fascist gangs.[5]

It is no surprise, then, that Russian teenagers seem at once excited, dejected, uncertain, apprehensive, and expectant. They, too, are deluged by new facts, theories and visions, many of which conflict violently with received knowledge. They find themselves on board a thrilling but possibly treacherous rollercoaster, unable to see where the tracks lead, unsure of whose hand — if any — is at the controls.

4.Paul Kennedy, *The Rise and Fall of the Great Powers*, Fontana (London, 1988); see Chapter 5, p. 248ff.

5. See *Soviet Youth Culture*, Jim Riordan (ed.), Indiana University Press (Bloomington, 1989), 148 pp.

We can contribute little enough to the torrent of expert, learned commentary on this extraordinary experiment. On paper Russian youth manifest no striking differences in their responses to our queries. Their insistence on their nation's role as peacemaker is clearly justified by Gorbachev's remarkable initiatives, as is a belief that their generation is special, at least in encountering an unprecedented situation.

Yet our experience in gathering such predictable data was by no means routine, was in fact a revelation of sorts. Once again the apparatus of picture-cards, cameras, forms and notebooks served merely as a passkey into another odd little chamber of the human heart. What we discovered there connects, I believe, though in no very obvious way, both to the question of who lies to us and why, and to what we see (or don't see) as a threat. To grasp these connections, we must follow the story of the political activist and the black-market trader.

Mikhail had been guide and interpreter for a colleague of mine who spent four months in the Soviet Union on a Fulbright. He knew English well, my friend said, and was besides a lively and intelligent fellow generous with his time. All this was true, and in addition Mikhail brought us luck.

When I called from our Intourist hotel, he said he was on his way that very morning to a conference of teenagers, half from our country and half from the USSR. We could meet him at the conference hall in downtown Moscow, and he would help us interview some kids there.

Mike, as he instructed us to call him, was a rawboned young man of 21, charged with an ungovernable energy for discussion, especially controversy. Within minutes of our first meeting he had plunged into our project headlong, begun a full review and criticism of its basic assumptions. He reminded me not a little of Dostoevsky's Razumikhin (*Crime and Punishment*), whose wild anarchist monologues are the counterpoint to Raskolnikov's morbid silence.

At Moscow University he had majored in American Literature, but was thinking now of changing to history. Study did not, however, interfere with his activism. He had founded the Moscow chapter of Beyond War, a Palo Alto-based organization for the encouragement of disarmament, and earned himself a two months' trip to the United States the previous year. He was also a member of the U.S.-USSR Cultural Alliance, and in that capacity had gotten wind of this conference.

He dragged us to the front-row seats in the main auditorium, where an Orthodox Bishop was holding forth on the history of dissent in the Church. There, hunched over Amon and me, Mike simultaneously plied us with questions, fielded ours to him, and maintained a stern, running critique of the official translator who was rendering the Bishop into English. Meanwhile, over his head, he held up a small wire recorder to capture whatever he might conceivably miss.

The conference was organized by the Hugh O'Brien

Youth Fund (the television actor was himself on stage with the other panelists), and partially sponsored by Coca-Cola. A group of about thirty U.S. teenagers came every year to tour for two weeks, taking joint seminars with their peers in the Soviet Union. Our new friend was already writhing at the lugubrious pace of the proceedings and the failure of the organization to stimulate more challenging exchanges; but he had hopes for a better session in the afternoon. Then a former ambassador to the U.S. was scheduled to talk, and Mike had thought up several embarrassing questions to pose.

For the rest of the day he took charge of us. He wangled lunch at Coca-Cola's expense, relying on brazen effrontery. When the ambassador turned out to be dull after all, he siphoned off four from the Soviet delegation so we could interview them in the lobby. When the meetings were over the whole group set out for Red Square and we went along.

Mike was doubling now as guide, pointing out the usual monuments, even as he maintained our many-leveled conversation. I found out that our irresistible slavic force had done his hitch in the wartime army and hated it, had therefore undergone a passionate conversion to peace work, had read all the American classics (Hemingway, Faulkner, Steinbeck, etc.) and many diverse new lights as well (Burroughs, Kerouac, Carver, Didion), had already listened to most of the new musical groups Amon could mention offhand, had deep doubts about the future and could hardly wait for it to arrive so that he could begin taking it apart and commenting further.

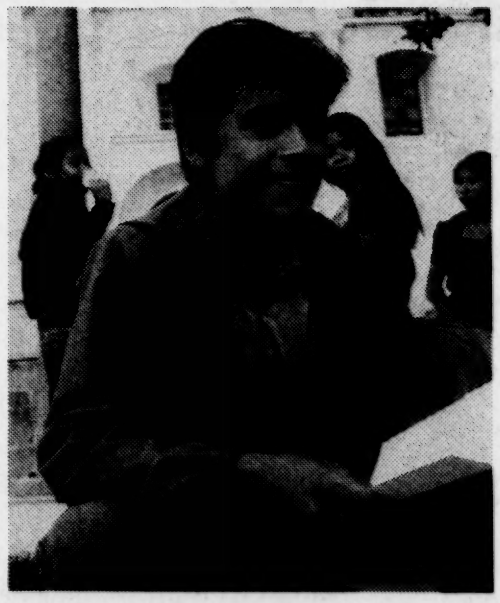
Engrossed in trying to absorb at the same time these brilliant harangues and my first impressions of the Kremlin, Lenin's Tomb, and Saint Basil's, I missed seeing Amon hook up with Oleg and Alex. He had to describe it for me a few minutes later, how in the shadow of the old cathedral two young men had unzipped their Jansport packs and released a cornucopia of tee-shirts, flags, and wooden dolls, some of which were swiftly traded for heavy-duty Gillette razors that materialized out of the bookbags and daypacks of others in the group. The whole moveable bazaar wrapped itself back up even more rapidly when one of the lieutenants of the Hugh O'Brien Youth Fund bore down.

They weren't American at all, Amon marvelled, they just looked it — perfectly. And kids from the States knew about the whole deal, had actually brought along dozens of the razors to trade. He had exchanged a few words with one of the street merchants — an accent but fluent and idiomatic — and gotten his phone number.

"Those little bastards," Mike scowled. "Those *vermin*. Stay away from them. They're the worst of Russia." He launched into a discourse on the pernicious effect of the black market, the powerful shadow economy that corrupted and demoralized the nation, singling out especially dissolute, parasitic youths who pimped and changed money and traded anything for anything as long as there was profit — in dollars — at the end.

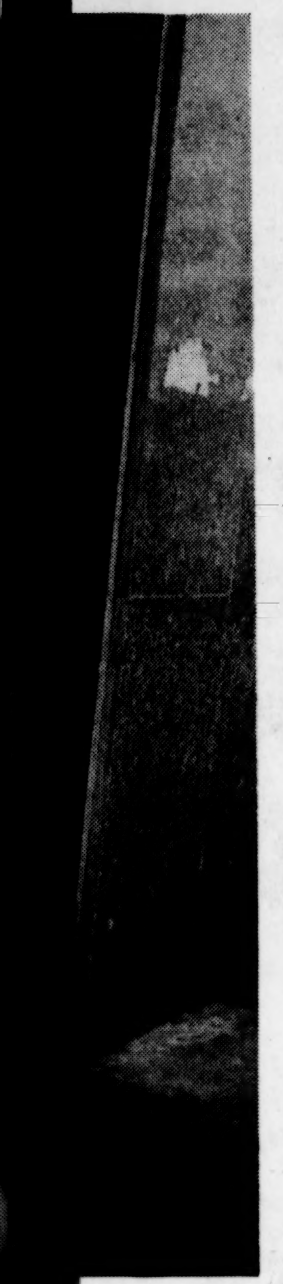
RIGHT:
Oleg is a black-market trader in Moscow, but he dresses like a U.S. teenager to evade the police. 19-year-old Oleg earns more in two days' trading than his parents (a motocross instructor and engineer) earn in a month. Piled high on his lap are the many goods he will gladly trade for American items or currency: Hard Rock Cafe "Mockba" and University of Moscow sweatshirts, Russian flags, lacquered boxes and Yuri Gagarin watches. I declined offers to trade my Levi's jeans, Nike tennis shoes and Casio watch. Oleg has defied the government in another way too: slashing his wrist to disqualify himself for service in Afghanistan.

FAR RIGHT:
I nearly started a riot at Kyunguli High School in Kenya. Students pushed and shoved to line up at the car window hoping to try on my headphones. The satisfaction of being noticed with an expensive Walkman was inconceivably greater than listening to the music.



RIGHT:
Carlos sells clothing for his uncle every day. Living in Antigua, Guatemala, this 16-year-old works all day and attends school at night.

BELOW:
The contrasts between the social classes in Egypt are nowhere more obvious than on the Nile. These teenage males, probably a private-school team, nonchalantly glided through the abject poverty surrounding them. Less than twenty yards away a peasant family sat cleaning their fishing nets in a dilapidated wooden dinghy.



The more he went on, of course, the more we were intrigued. Everything we had read about the new Russia suggested that the fate of *perestroika* depended in significant measure on the government's success in displacing this elaborate subterranean economy in favor of an official and fairer system of distribution. How could we resist an opportunity to know the problem first hand, from the inside?

Still, I knew pangs of guilt the next day, meeting Oleg and Alex under one of the statues of Lenin that serve so well in Moscow as rendezvous points, picking up a tee-shirt and blouse for gifts, changing a twenty in absolute defiance of the ominous warnings on my currency declaration form. But there was no doubt Amon's sharp eye had put us in touch with a fascinating element on the streets of Moscow.

Their disguise was perfect. Close-trimmed and scrubbed clean, garbed in hi-tops, shorts, American logo tee-shirts and Ray-Bans, the Jansports slung casually on one shoulder, they could have walked off any Midwest campus. Oleg was a very youthful 19, fair and of medium height, with an easy, wholesome smile. If he kept to his surprisingly colloquial English — learned entirely at his trade — no cop would ever spot him as a Soviet citizen.

As it turned out, he was as interested in us as we were in him. He wanted to help us — without charge — to interview other teenagers. He was willing to spend all day at our disposal, practicing his English and trading solely in information.

Much of the best material surfaced only at the end of the day, after our work in Gorky Park, talking to some shiftless boys and a pair of very proper airheaded twin girls and their mother. Oleg took us to the mezzanine restaurant of one of Moscow's finest Intourist hotels, finessing his way past the door guard by pretending we were all American guests, then charming a waiter into giving us an excellent table. (I won't try to explain how difficult it is to get into and then get served in a restaurant in the USSR. But it requires, trust me, great skill and usually some cash.)

The twenty I had changed, at six roubles for the dollar, would probably cover a meal for the three of us, even though we were clearly dining in some splendor here. There was a band playing a plastic rock, and fashionable Muscovites were all about, carousing, stuffing themselves, and boogieing. The official rate was three dollars for two roubles, so by the standards of the law-abiding, we were getting $150 worth of caviar, filet, imported wine and bad music.

This was not, Oleg said, so unusual. On a good day he could make 200 roubles ($300 at the official rate). As a yardstick he cited the case of his parents (father a motocross instructor; mother a laser engineer), whose combined income was 350 roubles a *month*. The razors picked up from American students fetched ten roubles on the black market — six to eight times the worth of the cheap shirts and flags he traded for them. Changing money, he merely doubled his investment, but the amounts involved could be substantially larger.

There were of course expenses. He paid a "bull" 300 roubles a month for protection. Really hot, aggressive traders might need extra goons. Everyone had carefully defined areas of operation and expansion came only through muscling in on someone else's turf. Knives and sometimes guns could be involved. Oleg gave us his clean-cut, winning smile; he was not, himself, that kind of operator.

Nor did he deal drugs, though there were plenty around. He estimated that 80 percent of the youngsters in Moscow had tried something, glue at least, and vets coming back from Afghanistan had brought hashish and heroin into wider circulation. These *Afgantsi* were also a very angry bunch, Oleg remarked. They now and then raged in the streets, breaking heads. Especially the heads of those who imitated the dress and manner of the wide-open West.

Oleg was not a veteran, for good reason. Amon had asked him earlier about a row of ugly red welts on the inside of one forearm. A shrug and another sunny, if ironic smile. He had done it to himself, to disqualify himself for the army. Nothing dramatic or confessional about this announcement. Just a fact of his life as a teenager in a modern superpower.

He did not pimp either, though there were girls working most of these grand hotels. Dollar whores they are called, since they insist on solid foreign currencies. The authorities could be harsh on such sex traders, while for a mere street hustler like himself the bite was only a 200-rouble fine. One good day's work.

We were a little way into the vodka by now, slowing up in our march through the fish and meat courses. Oleg was making an effort to explain the motives behind his choices. We had to understand first how everything he had been taught as a child turned out to be false. In school he was assigned, over and over again, Brezhnev's three inspirational books. All propaganda, and perhaps the three most boring books ever written. At Pioneer Camp (an official youth club somewhat like the Boy Scouts) Russia was held up as the greatest, freest, richest country on earth. Foreigners were described as mostly spies and saboteurs. During the Olympic Games in Moscow in 1980, children were instructed to stay completely away from the visiting athletes and fans.

Then, at the age of fourteen, Oleg was ready for induction into Komsomol, the official organization for Soviet youth, with its own congress, newspaper, and representatives in the Supreme Soviet. Komsomol advertises itself as "an active, creative and educational force in society, the organizer and leader of youth, a school for ruling the society and the state." The ladder, in short, to the party inner circle, the *nomenklatura*, the good life.

But after a couple of years Oleg did not believe in the glories of belonging trumpeted by Komsomol into the ear of every Soviet boy and girl. He was seeing that his stipend as a new student in radio and electronics was a lousy thirty roubles a month, while others no smarter than he were buying their way into high-powered college prep courses. Oh yes, did we not know this? All the way up to the medical and law schools, money opened doors. "Protectionism" was the phrase, protect thyself the gloss.

But his people were ordinary people; they had no connections, no juice inside the system. So he had taken up this business and made good money at it. He was young and liked to party. Was this so bad? He helped support his family and no one was harmed. He wouldn't stick with it permanently, of course. You could't keep looking like an American college kid forever, and your face would eventually become familiar to the police. He would have to do something else. Maybe his English would come in handy.

We encouraged him to think so, ordering our dessert, coffee, and cognac. I promised to look for some language tapes when I got back to California and told him about the U.S.-USSR Cultural Alliance. They might help him find a tutor, an internship of some kind. He agreed politely, but his smile had gone a little out of kilter and wistful. When Gorbachev had first come in, he said, he had hoped along with everyone else. But things were going on the same. Or worse. The economy. No decent money and no quality goods, without some scam.

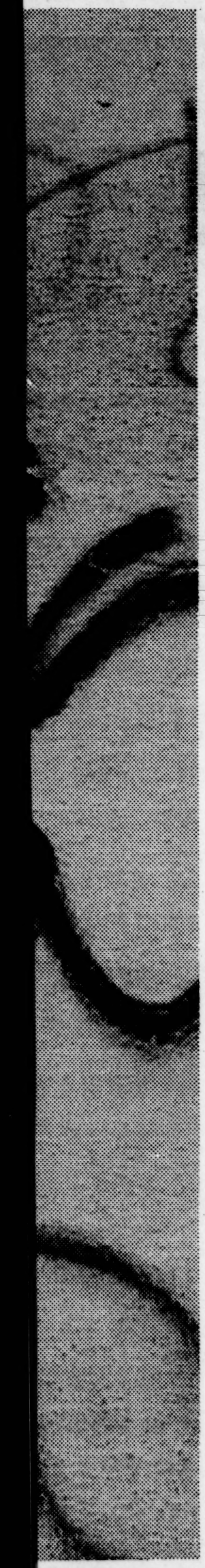
The check never came. When we got up to leave and I looked around for the waiter, Oleg confessed that he had already arranged the matter. His treat. He had enjoyed helping along our project and we were, after all, guests in his country. Strenuous protests were of no avail; he wouldn't take a rouble.

He did, however, accept one more favor. He escorted us back to our hotel, but asked me with some embarrassment to walk him in turn to the nearest subway station. He was away from his own turf and had spotted other traders around the lobby. They could summon their bulls, follow him and shake him down. With a foreigner he would be safe.

So I extended the protective umbrella of American power all the way to the turnstiles, where we said farewell and embraced a little awkwardly but sincerely. With a little help from Stolichnaya we had achieved *glasnost*, and walking back to the hotel I felt for a moment part of the great experiment, having played bull for one of the parasites on the underbelly of the new Russia.

Mike was furious. We argued off and on all the way from the Lenin Library to Arbat street. The sidewalk artists there, musicians and painters and jugglers, were at least contributing *something*, whereas black marketeers were vampires, fattening themselves at the expense of others. *What* others, I wanted to know. Oleg was sucking only tourist blood, as far as I knew, and those American kids *asked* for it; they brought their Gillettes from halfway around the world precisely to serve the black market.

Amazing that a professor could be so naive. There were millions of Russian workers just barely squeezing by, young guys who risked their lives in the war, a



very tough life, so how did they feel when these little bastards chiseled all kinds of money and bought up what few goods were available? Of course the economy was fucked, but people were trying to change that and build something, while these little *mafiosi* just took advantage of the situation.

He had a point. We were flailing around one of the major issues in all of history, the ancient feud between the "House of Have and the House of Want" (George Bancroft). The good Bishop had touched on the issue the day before, slyly pointing out to the Americans the shared etymological root of communion and communism. True enough, both the Church and the Party claim the high ground for the House of Want. They insist that Christian or Socialist man is perfectible, can be made selfless, even self-sacrificing. Poverty and humility become, in such systems, marks of virtue; greed and self-interest the cardinal sins.

Against these ideals we must pose the new gods: Market Forces and Economic Growth, surrounded by their archangels, the wizards of finance — brokers, junk bond kings, arbitrageurs and CEOs — and below these the angels, the aggressive and thrifty middle class — professionals, business people, investors — and below these the hordes of ravening consumers, who are also the workforce that keeps the mighty spheres spinning. The ideology here neatly inverts the morality of Christianity-Communism: selfishness is normal and healthy; it produces the energy to run everything, and the surplus wealth necessary to any meaningful exercise in benevolence.

At the moment the new dieties seem by far the more powerful. Their temples are lavish, their ceremonies splendid. The Shopping Mall is the blessed bread and staff of this life, and everywhere ordinary people clamor for it, insatiable. Verily, to buy is to *be*, and to be is to buy more.

So not many people are listening these days to ascetics and beggars. In recent years, in fact, holy men migrated to places where they needed a very large bowl to take care of the Rolls Royces, country estates, and pretty followers they were acquiring. Idealists like Mike, arguing for secular salvation through a simple, honest effort to change, take on a lonely and thankless task. Everyone around them is talking money. (Even the old God Jehovah, by Oral Roberts' report.) Everyone can see that communism doesn't work. Everyone knows that the vanguard of the proletariat is rubbing shoulders with the racketeer and prostitute at the luxury hotel, drinking expensive liquor and dancing to the dynamic beat of blow-your-brains-out self-indulgence.

I couldn't bring myself to mention it, but of course I suspected that Mike had envy to deal with, too. His education, talent with words, and travel experience in America hadn't given him access — so far — to special advantage. Anyway, brash and outspoken as he was, he might have trouble finding a niche in those large and obtuse institutions that generally control such access. And the professions he was likely to choose — academician, translator, peace organizer — would probably never pay what Oleg was already, at 19, making easily.

That had to hurt, as it must have also hurt to hear Amon and me defending a type he detested. He was, after all, a Yankophile. Like the street hustlers he went around in sneakers and sweatshirts of U.S. manufacture. His apartment was full of books by American writers or on American culture, and tapes by everybody from pop masters to underground cult groups. He had hung out so much with Americans he resembled them exactly — just like Oleg.

A remarkable proliferation of wrenching little ironies. I recalled the lunch Mike had conned out of Hugh O'Brien and Coca Cola — not so different from Oleg's greasing his way into the fine restaurant. Also their shared dislike of the war machine, and their hard-earned fluency in English, however different the uses they put it to. Most of all, of course, the fact that I liked them both and yet could see clearly how they posed for each other a most painful dilemma.

The essence of that dilemma is that in Russia the street hustler and the moral activist cannot afford to understand each other too well. In a period when the whole nation is in turmoil, they challenge each other's character at the point of greatest vulnerability, especially if both are young, newly committed. The hustler dreads having someone (like an angry prophet) force him to look into the mirror and face the implications of his life — the pettiness and vulgarity of scamming, the empty pleasure of clandestine posession. The utopian ideologue resists quite as much those who have a bird in each hand already, and may soon corner poultry futures entirely, because they show up the wispy improbability of any scheme that does not begin with a fire, a pot of water, and a chicken.

I have come to believe it was no accident we found these two, so different, so quickly. They are already Global Teenagers, sketched accurately after our very own American model. Not only our clothes, our slang, our money, our music, but even our *ideas* were at issue here. Profiteering and moralizing — could anything be more quintessentially American? What is our Congress but an endless minuet around these themes?

Only we are not in the habit of living those ideas so fervently, experimentally, consciously. To do so would be to expose their contradictions. But one consequence of our successful propaganda is that other people may actually *believe*, sometimes passionately, and that can be embarrassing.

Resting on a park bench in the afternoon, having at last (we thought) dropped the argument, we were approached by another trader. He assumed Amon and I and Mike were all Americans, since we were speaking English, and launched into his change-money buy-a-flag spiel. Mike let him finish and then said one sentence in Russian that turned the kid around, red-faced and jut-jawed.

LEFT:
Four views of the whole Earth, supplied by alien white beings in a northern Indian village. Now herding the family cow, the boy in the center said that ten years from now he'd like to be herding his own cow.

"I told him what he was," Mike growled, "and to fuck off."

We were about to move on when the kid returned with his bull in tow. A stocky fellow, with an unkind look about him. I glanced around but I didn't see the cop we had interviewed outside the gate a half hour ago. Only a couple necking obliviously two benches over. Mike got up and moved to meet the torpedo. He's a big kid too, long arms, and maybe two hundred pounds.

Amon and I sat very still and talked earnestly about whatever came into our heads. Mike and the bull had a short conversation, not loud but very frank. You can generally tell by a certain set of the feet and shoulders when people are discussing the possibility of beating the baloney out of each other. Here some compromise was struck, not at all friendly and obviously provisional, but its terms allowed us to walk off at a deliberate and dignified pace.

The head of the Moscow chapter of Beyond War was ready, then, to belt those among his countrymen who fell easy prey to the siren call of libertine capitalism. He could no longer cover up the depth of his attachment to the old outmoded gods of hard work and fair play, his true Marxist's (and true Christian's) passion for reforming humankind, or at least keeping them honest. Mike has nurtured the kind of vision of the world in which — absurd, if you think of it — Abe Lincoln could still be elected president.

And who did Oleg choose as his hero, over Lenin? The very same honest Abe. A nostalgia pathetic rather than absurd; for our trader friend is already preparing himself quite well for life in the modern Free World Economy. His country is perhaps groping toward a system that will resemble ours, multiplying opportunities for thoughtful youngsters like himself. Boesky, Milken, and the Hunt Boys can show him the dazzling prospects offered by a system designed by and for the sharper.

But it may be too late. Already, before the revolution, with his peddler's bag of tee-shirts and wooden dolls, his money to burn in the dinner clubs, his security guaranteed by goons, Oleg has a hunch this is not what he wanted, not what he really wanted at all.

What Questions Do You Want To Ask The Young People In Our Country?

I have said more than enough, already. Here I think the teenagers' responses can speak eloquently enough for themselves.

Their questions and responses:

What do you search for in life?

What games do you play?

Youth is the future that we must work out without regard for nationality or color because only together can we reach our goal and not only you have ideas, which are not valid unless all youth has these ideas leading to the good.

Is it true you're all on drugs and estranged from your families?

Don't live like robots; but I congratulate you on the means you have for being independent. Be more careful . . .

You're handsome.

Why not leave the drugs alone?

Why do you have so many TV channels?

ABOVE LEFT:
This high-school student in Rio had come to school on Saturday to complete the last-minute preparations for her class yearbook. (Being the Chief Photographer for my school yearbook I instantly understood the nervous attitudes which always accompany last-hour paste-up.)

ABOVE RIGHT:
In countries like the Soviet Union (shown here) and Guatemala, young women hugged and held hands with each other often, while men didn't. In Egypt, however, the opposite occurred. Teen boys commonly walked with arms over one another's shoulders, but young women seemed embarrassed to do this with other females.

Do you want *change?*

How come teenagers in the U.S. are so apathetic to what is going on around the world?

What do you think life is about?

Are you happy — I mean, really?

Why don't we unite to protest against nuke weapons, deforestation, hunger, etc.?

Who are your heroes? What would you like to be doing in ten years? Is there anything special . . . etc.

What do you think of the second coming of Christ?

Do you believe in life after death?

Does the word intifada *mean anything to you?*

Do you like Tom Cruise?

What are you proud of?

Have you done your best duty today?

Is there as much violence on the streets as they tell us?

Do you love Einstein?

Fuck you.

Why are you so laid back?

Do you think your country has been developed to climax position?

Why do you want to be a world power?

Do you people realize how important and how strong we can be if we want to?

Have you the sure good eye about your life and your doing?

This last question is one we would all do well to ask from time to time. Here it may preface our final, brief review of our project. We began, remember, with the great question, Is there such a thing as a Global Teenager?

Well — you probably knew this was coming — yes and no. Or more precisely, no and yes. In the sense in which we originally conceived the proposition, we found no consistent homogeneity of values and character traits, no emerging monoculture at a fundamental level. The youth on the planet are indeed more aware of the precariousness of its water supply, but the Masai villager, the Indian clerk, the Brazilian thief and the London skinhead will still approach that issue in their characteristic ways. So with the threat of nuclear war, plans for the future, and the nature of truth and falsehood.

On a more superficial plane, however, the Global Teenager has already arrived, and he and she are most definitely an American creation. They care about buying things, lots of things, to wear and drink and drive and see and listen to. They are willing to work, scheme, and even steal to get the money to do that buying, and most of all they want their purchases to look and feel right. They desire a lifestyle, rather than a life — so warty, misshapen, and hard to control.

So I have but one word of advice for those multinationals who may hope to tap into this GT market. Your propaganda campaign is already a success. The youth of the world wants or is capable of wanting every taste treat and fashion switch you can devise: they want Levis, Cokes, cassette players, video games, Benetton combos, Big Macs, skateboards, PCs, Yamahas, etc. etc. No problem.

Except they don't have any money. Everywhere we went, except England, the wage for teenage workers ranged between $30 and $100 a month. Checkout clerks, ditchdiggers, farmhands, shoeshine boys, waitresses — these are the jobs young people get: all the boring, low-paid, hard work of the world. They flock to the cities to stare through the shop windows at all the *things* you make and offer for sale; they scrimp for months to buy a couple of blouses or some boots, a cheap watch.

The Economy as I have said is a deep, deep mystery. My plan takes no account of its tremendous complexity, is probably hopelessly naive, but I can think of no other. These kids want very much to buy, but have no cash. You have lots of money — or so I have heard — and you want to sell. Why not get together and send a lot of your money to these needy youngsters? They'll use it, I can almost guarantee, to buy your stuff. On this score, at least, they're just like your own kids.

Well, take it or leave it. To sign off now, I want to borrow the words of a young Thai who had a charming way with English. Many of his countrypersons from this Land of Smile added polite and affectionate farewells at the bottom of their questionnaires. His was

bye bye
Love and Thinks of a stupid. ■

Selling the World

Mouseketeers to Marketeers

BY KEVIN KELLY

Amon Rappaport

Mickey may have been the first global teen. It's hard to go anywhere in the world where he hasn't already been. He usually appears without the official blessings of Disney, as a sort of global teen runaway. Like other runaway kids in Cairo, Egypt, he wound up peddling soft drinks on the street.

Swatch schoolbook jackets.

TO THE QUESTION "Is there a global teenager?" the major consumer manufacturers answer, "Definitely yes."

It is a significant issue for those who make things for kids. There are now 1.37 billion people between the ages of 10 and 19, yet most of them are *not* living in the US. But the companies that advertise globally have found that these international kids respond to their products in a similar way. According to ***Adweek's Marketing Week*** (February 6, 1989), Benetton, Coca-Cola, Pepsi, Levi Strauss, Gillette, and Swatch, among others, "are now behaving as if there is one generic type of teenager in most parts of the world." A look at the images on these pages confirms this.

Whatever the reasons or deeper social meanings, these companies point out, aiming a pitch at the global teenager works. They do concede that it only works on TV, though. Print ads still must be tailored to local "untranslatable" traditions. However, TV commercials are a universal language, apparently appealing without distinction around the world. As Tim Schramm, director of international advertising at Gillette International told me, "We are using the same TV commercials in 19 countries and they all get the same results."

TV, combined with rock'n'roll, is nearly symbiotic with the global teenager. MTV and its clones are now in 24 countries. MTV plans to launch a global TV-magazine show of music/culture/fashion sometime in 1990. The Swatch watch company is contemplating a regularly scheduled global teen show called "Swatch This," based on a half-hour show made four years ago — the "Swatch

In heavy black-on-black fashions, Japanese teenagers herd into a MacDonalds in southern Japan. Rock'n'roll blares from speakers inside.

The United Colors of Benetton, a highly calculated system of tracking kids' color preferences around the world. Said the founder of Benetton, "Teens wear uniforms. There's a global teenager emerging. I want to make the uniform for global teenagers." Benetton stores are now found all over the world.

World Break Dancing Championship from the Roxy" — which was syndicated in 13 countries. Numerous other pilot shows directed at the global teenager have been produced, including one (made in London) that featured a global weather report — snippets of a monsoon in India, a heat wave in Brazil, and dust storms in Morocco.

It is interesting to keep in mind that global marketing has been tried many times but never really seemed to work . . . until it was tried on those under 20. There are a number of other things that have been tried globally without success that may yet work with those under 20, too. Environmentalism, world government, resource sharing, and good old peace are the ones that readily come to mind. ■

Hello Tomorrow,
Your children are here.
Can you hear the new drummer?
The future is clear.

We're taking our place now.
We're grabbin' hold
On a rainbow of promise
We are your gold.

A generation of change.
A generation of song.
A generation of laughter
Coming on strong.

A generation of color.
Black, white, yellow, red.
A generation of Pepsi
A generation ahead.

We speak the same language.
We share the same voice.
We feel the same feelings.
But we make our own choice.

A generation of life
Now let it be said
A generation of Pepsi
A generation ahead.

Generation, Pepsi, generation.
A generation ahead.

Amon Rappaport

*A street sign in Argentina points the way to the future — jeans. (Note how the logo stylishly rises above the decrepit street names.) In countries outside of the US, Levi's jeans are marketed as providing a slice of the American Dream. In Japan, James Dean in jeans and cigarette (*Rebel Without a Cause*) is the central imagemaker.*

(Left) Lyrics to new Pepsi commercial filmed in San Francisco. About 80 percent of the 300 children used were non-white. © 1989 PepsiCo.

Don Ryan

Kevin Kelly

Coke around the world. On the one side of the bottle, the classic logo; on the other, the native script, with often-clever translations. The Chinese version, "Ke Ko Ke Le" means literally, "you can have happy feelings in your mouth." The scripts from left to right: Arabic, Ethiopian, Japanese, Chinese, Korean, Arabic, Hebrew.

Apocalypse Juggernaut, goodbye

by Kevin Kelly

THE ORTHODOX DOGMA for the last couple of decades has been that there is no end in sight for the increase of population of humans on earth. Nearly everyone can draw the generic graph of surging human population rocketing further off the charts, nearing infinity with each passing year. That's the population bomb.

The proposition that in the future we might actually be in for a population fizzle is so unthinkable, so contrary to our common agreement, that it borders on the laughable. What sane or compassionate person could suggest that there is no population problem on earth? Yet when I set out to verify the population statistic underlying the premise for the Global Teenager theory, I found sane and compassionate people holding what could only be called population heresies.

My first alarm came in trying to pin down the exact year in the nineties when the world's population of people under 20 reached 50 percent of the total (see Premise on page 2). It didn't take very long looking at the statistics to see that the sheer number of teenagers in the world will increase dramatically for the next several decades. There will be *six million* additional teenagers for each year you live.

Further study showed that in the less-developed countries, the ratio of teenagers to non-teenagers often exceeds 50 percent right now, and is due to grow. The numbers from the World Bank and UN pointed to whole countries, like Mexico, where the average age was 15. Here indeed were global teenagers. Literally billions of them. And 90 percent of these kids will be coming of age in the non-industrialized world. But much to my surprise, as plentiful as they are, the ratio of under-20s to adults taken worldwide is currently only 43 percent, and projected to *drop* for as long as any demographer is willing to estimate.

The human population on the planet as a whole, then, is aging. Getting older by the minute. The average age of a human citizen on the planet Earth will slowly creep from 23 now to 32 in another 50 years. "Wow! 32, is that old!" said the population expert Carl Haub when he uncovered this statistic for me. "What do you mean old?" I asked him. "Well, we usually associate a median age like that with a very developed country. That's the median age of the US now, and it's an aging society."

Maybe different figures would give a different story. A few phone calls made it evident that almost all worldwide population figures ultimately come from only two sources. No matter who was quoting them, conservative, liberal, scholar, crook, the fountainhead was either the UN or the World Bank. I can't speak for the accuracy of their data, but everyone talking global is playing with the same numbers. The World Bank is more ambitious in publishing projections of where they think population trends are pointed, so the numbers cited below derive from them. In particular I used a new, unpublished Working Paper (#WPS 115, October 1988) from the World Bank for their latest projections as of October 1989.

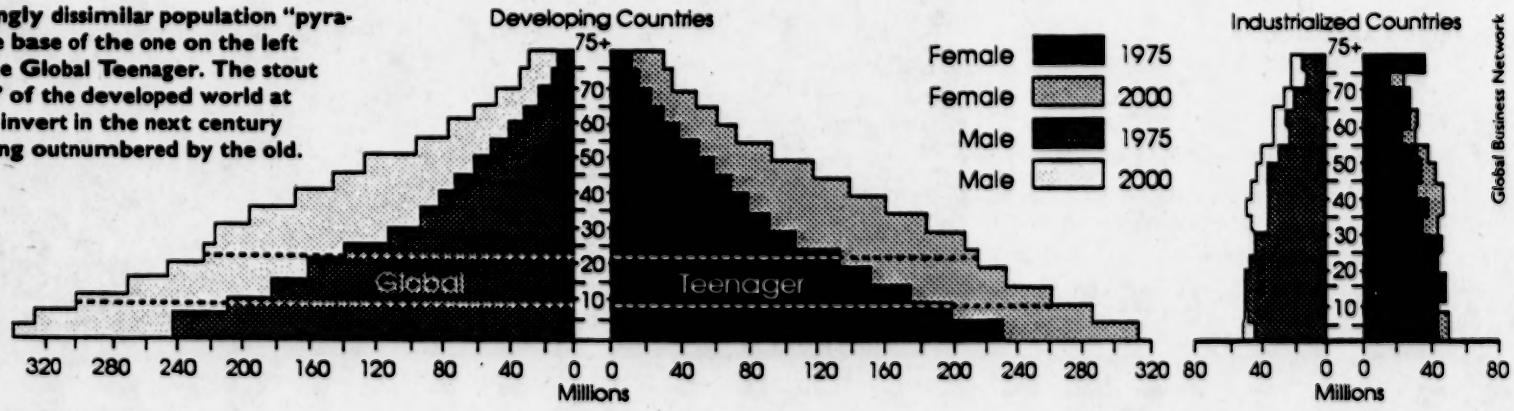
According to this report, within 35 years (by 2025) the world's birth rate will decline by 10 points (a point is a tenth of a percentage); the death rate will decline by less than 2 points, yielding a fall in the world's annual growth rate from 1.7 percent to less than 1 percent. The rapid decline in birth rates experienced by developed countries will be a worldwide phenomenon. Within the last several months alone, several nations thought to be population basket-cases, Brazil and Kenya, astounded the world with news that their birth rates have been plunging. Especially striking is Kenya, because it has the world's highest birth rate, even counting its decline. When the fastest slow down, we are in for a turn.

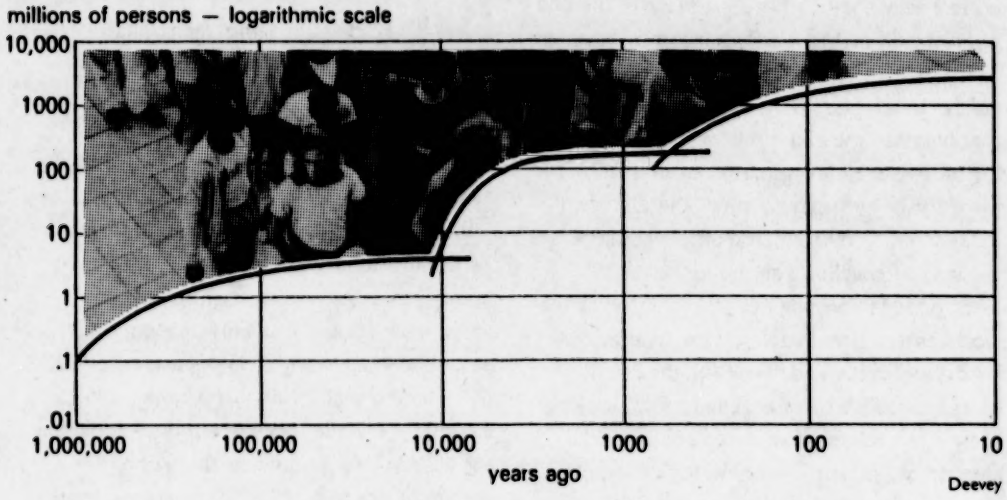
At this rate, how long will it take the world to reach global zero population growth? The amazing answer is: 50 years — about 2045. This date, technically called the Replacement Year, or the date when the average women's fertility will exactly replace herself and her mate, is fairly widely accepted by the various population agencies. But, as these same experts say, it is not rates that crowd the earth, but absolute numbers of people. The date when the actual population of Earth reaches its "peak" of human passengers (called the Stationary Population) does not occur until a century later. The population of Earth then is projected to be 10.8 billion.

The lag between the two stabilization points is due to something called demographic momentum. Absolute population can continue to increase while growth rates are falling because, although reproduction may be merely sufficient to replace the parents, the parents are still around for a generation or two, padding the count. And all the while the reproductive rate is above replacement there is an expanding base that will reproduce. When you are starting out with billions, and you drop the rate quickly, you still wind up with a humongous bulge that has to run itself out. We are riding that wave.

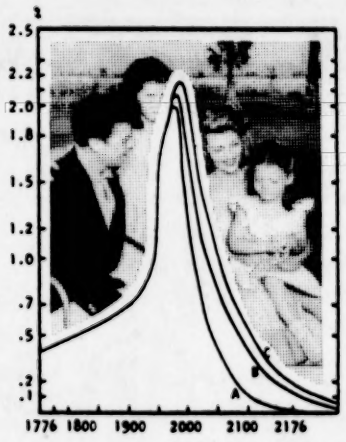
Malthus was wrong. As the granddaddy of population study he was quite right about the population dynamics of animals, but human population behavior is far more complex and slippery because we are so adaptive and meddlesome. Malthus posited that 1) Populations are limited by available food and subsistence resources, and 2) Pop-

Two strikingly dissimilar population "pyramids." The base of the one on the left harbors the Global Teenager. The stout "pyramid" of the developed world at right may invert in the next century — the young outnumbered by the old.





Logarithmic graph of population of humans on earth. First rise is attributed to invention of tools; second to invention of farming/husbandry; third to invention of machines and industry.



Herman Kahn's 1976 guesstimates about the growth rate of the world population.

Three scenarios, ranging from best case (A) to worst case (C).

ulations always increase when the means of subsistence increases. Neither of these postulations is true for humans. Because of human ideas, innovation and work, the amount of food has increased as population has increased. There are food surpluses in many nations, and few have true famines. Most famines in recent decades are due to maldistribution of available food. And because humans, unlike animals, deliberately self-regulate their fertility even in primitive societies, population growth does not follow standard of living. There is ample evidence in old times of marriage and childbearing following the patterns of good and bad harvests. And population growth is declining the quickest in societies with the greatest abundance of food/resources, the complete opposite of what Malthus claimed. In fact a better case can be made that an increase in population numbers will *increase* the availability of subsistence resources.

That's the argument of population heretic Julian Simon, who maintains in *The Ultimate Resource* (p. 51) that population growth has long-term benefits. He traces the variable rate of population growth in the past (ancient Egypt and Babylon were at one time as populous as in the 1960s) and shows how a rise in population is linked to a rise in inventions and innovation throughout history. He goes on to relate the historical and continuing drop in real costs for all resources including energy, and finally argues that the wealth of any society is in its population. People are not drains on the wealth and resources of a nation, but the producers of it. If a person produces more than they consume after society invests in their 20 years of childhood and education, then that person is a net gain — the more of them, the bigger the collective net gain.

That "if" is a big **if** that isn't happening in many places in the world at the moment. But it is equally clear to me that Simon is right. High population size, density, and growth rate are currently scapegoats of a mythic dimension. In reality, properly cultivated by institutions that work, hefty populations are the engine of sustainable human advancement.

So where do we put all these people we are supposed to welcome with open arms?

The world's population is estimated to peak at 10.8 billion. That's roughly twice the present world population. What will it be like if we double the world's population density? Right now the earth is peopled at an average density of 100 persons per square mile. Doubling that at our peak makes it 200 persons per square mile. To give you an idea of what breathing space at 200 psm would be like, here are some density figures for countries (in 1989) in persons per square mile: Taiwan, 1,604; Netherlands, 1,031; Japan, 857; Belgium, 841; Germany, 640; France, 266; Indonesia, 251; Kenya, 107; Ethiopia, 105; Nicaragua, 70; USA, 69. At the peak of the earth's population bulge its average density would be equivalent to the current population density in modern Greece.

Of course, nowhere is population spread out evenly to an "average" thickness. According to a recent Sierra Club report, about one third of the Earth's land mass remains in wilderness. While that wilderness could potentially hold newcomers, it's mostly hostile to habitation — tundra, polar regions, swamps, and deserts — and so will probably remain uninhabited.

Most likely the new population will follow the pattern we already see. They will settle in the cities. The countryside will produce more food with about the same number of people (and in many cases with less people), while the cities swell. Small cities will become large. Large cities will blossom into huge cities. And huge cities will mushroom into megacities.

According to Peter Calthorpe and other progressive urban planners, a city can be the most environmentally innocuous place to live. A city with mass transit, multi-family dwellings, and active recycling systems would be the most environmentally efficient place to put a human. Japan and Holland have proved that high-density urban living can be high-quality living. Most cities outside of America, particularly in developing countries which have no choice but to be resourceful, are far closer to an ideal than our cities are. They are already intensely recycling, while we are not.

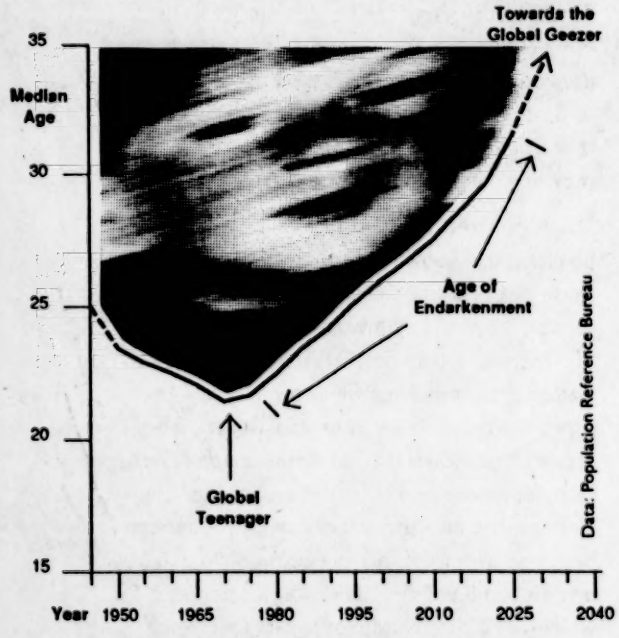
Simply put, the worry in the future will not be planetary elbow room. The worry is that these global newcomers will abandon their sensible ways and adopt the wasteful practices of America. If they do that, the world's population of automobiles will grow at a rate four times the growth rate of people. Several observers have noted that an American does not really consume significantly more raw resources than an Asian peasant, if said American does not own a car. It's the automobile population bomb we should be worried about, which will guzzle resources for its fuel, roads, construction, support, and burial, if we let it. My own experience of global teenagers (and the results of their attitudes about cars in our survey confirms the same) suggest that they are wiser than that, and thus wiser than we are.

Yet as futurist Peter Schwartz has pointed out, even if recycling, cities, and transit ran at 95-percent efficiency (and they don't, but that's about the highest that one could expect) there is still 5 percent waste and entropy that we depend on the Earth's environment to absorb. No one knows the renewing capacity of the Earth now, nor whether it could handle the least of our wastes at the level of 10 billion. On the other hand, early Dutch travelers to Java in Indonesia found it "crowded with the unemployed" to the point of sinking and were flabbergasted that the island could hold as many as it did, 4 million. It now holds 113 million, and visitors are equally flabbergasted, but holding their tongues.

I don't think our journey to 10 billion will be rosy. I have no doubt that 10 billion will leave the face of the earth changed as much as the last 4 billion have. I've lived in the thick human soup that is the city of Calcutta and try to keep it in mind as I write all this. So I agree with Michael Ventura who writes that this coming period will be our Age of Endarkenment (see page 44). It will be a century of blind re-ordering, erasing the past, scary rites of passage, vague glimpses of new things, and

strong emotions but No Answers. He calls it the world's adolescence. A potentially dark time between childhood and adulthood when one tries to figure out who one is. In this case the "one" is the collective human life on Gaia. And it seems certain this dawning started in the 1960s.

That date sparked something in me so I went back to my population statistics. I asked the Population Reference Bureau, the non-profit agency that supplies organizations such as World Watch with population analysis, to chart the median age of the earth's human population as far back and as far forward as they could. This is what they came up with:



The median age of the human population on earth. The median age for 1990 is 24.

The day of the Global Teenager is not someday in the future. It has already begun. The apex of human youthfulness in this cycle of history was the legendary period between 1965 and 1970. The zest, excess, rebellion, and animus that we associate with sex, drugs, rock'n'roll, and student revolutions around the world were the first rush of hormones in the global teenager. It first erupted like a rash in the West and is now spreading worldwide. It won't leave until every cell of human culture has undergone its baptism.

More importantly this Coming of Age is a closing — childhood's end. Management guru Peter Drucker says that there are passes much like geographical ones that divide one watershed of political and social landscape from the next, and that sometimes in the course of time, the world eases over a gentle rise of land and passes the divide without even noticing it. In his most recent book (*New Realities*, 1989) he says, "Sometime between 1965 and 1973 we passed over such a divide and entered 'the next century.' We passed out of creeds, commitments, and alignments that had shaped politics for a century or two. We are in political *terra incognita* with few familiar landmarks to guide us." Francis Fukuyama, a deputy director at the U.S. State Department, is bolder. In a very provocative think-piece ("The End of History?" in *The National Interest*, Summer 1989) that was widely discussed in foreign-policy circles, he says we are entering a period that heralds "the end of history" in an ideological sense. He exaggerates, of course. But the spirit of his paper follows "the age of endarkenment." When a child enters puberty, the laws of childhood are no longer a sufficient guide to forming her new identity; as the world enters global adolescence, its previous history becomes inadequate for the invention of its new self. At this edge in history, looking back won't tell us what to replace our old identity of "nation" with. We look forward into an unlit teenage whirlwind.

Adding to the tempest of this storm is the curious phenomenon called "high adolescent density," the observation that when the number of youth in a society overshadows the number of mature adults, kids have no role model except other kids in the same boat. Call it the *Lord of the Flies* syndrome. Anything can happen, and whatever does happen forms the psychological basis for the rest of that generation's life. In the long run, the most important thing about global teenagers is that, like the baby boom in America, their character will be the main event of world culture long after they outgrow pimples.

As many have pointed out, teenage adolescence is a modern invention (first introduced in 1904). In ancient times a person passed from child to grown-up through a rite of passage that lasted at most several weeks. In contemporary times, a person passes into perpetual rites of passage that have become their own domain — teenagism. Teenagism seems to feed on middle-class nutrients, first appearing whenever and wherever a middle class sprouts. In America — history's first society to be dominated by a middle class — we have the first culture dominated by teenagism. Extended teenagism, actually, since teenage perspective and lifestyle in the US start at 10 and continue to about 35 years old.

As the world's developing countries enter a period of "demographic transition," shifting from a two-tier culture (child/adult as well as lower/upper class) to a three-tier one (add adolescence and middle class) they become ripe for ideas on how to behave in this new context. One of the most infectious ideas is America's chief export: How To Be A Teenager.

It's not all Levi's jeans, Coca-Cola, and Michael Jackson. It's also about exploration, trying stuff, not believing the past, increasing mobility, employing irresponsibility sometimes, flexing muscles, being preoccupied with self, allowing brilliance, and channeling highways of fresh energy into never-before risks. In short, the global teenager is in charge of making up our new identities as he goes along. The answers to the questions we aren't asking yet will come from someone who is just a kid in Sri Lanka or Brazil.

My readings in demographics have made it very clear that the worst weather forecast is more accurate than population predictions have been in the past. In the 1930s, when US birth rates were nosediving steadily, no demographers forecast the sudden boom in babies in the '50s, and none forecast the boom's equally sudden demise. Merely twenty years ago, at the height of the population-bomb scare, Paul Ehrlich and friends were loudly predicting a US population of 400 million in the year 2000. (Stop having babies, please!) Even while they were shouting, the US was headed into a birth dearth. Without immigration, it would be losing population soon. To many people's surprise population decline has hit other countries as well. Germany and Hungary struggle politically about what to do about very low birth rates, while child-poor Singapore charges ahead and offers state-financed dating exchanges to boost marriage rates and kids. More countries could very easily be at the threshold of stationary populations with modest drops in growth rates. Like mortgage payments, small reductions now can reduce the final tally enormously.

I'll take my chance and make this prediction: During the coming century, the issue will not be explosive population, but the problems brought by receding populations. Environmental issues will remain, but they will eventually feel the new political pressures of low birth rates (fewer laborers, aged and infirm population, overall less robustness in solutions). We'll live through an entire planet full of teenagers, somehow. When they are much older they will fill up the world with Global Geezers. They may rightfully wonder who is going to take care of them when they're 64. All will marvel at the hysterical and superstitious belief in the late 20th century of a runaway population monster that was going to gobble up the world.

But since I'm a rank amateur heretic, I'll hedge my bet with an alternative scenario, more in keeping with the times. On the following three pages, R. Crumb, one of this generation's greatest iconoclasts and no man's fool, revs up the projectors and shows what it'll be like if I am wrong. ■

Sources

World Population in Transition by Thomas W. Merrick, with PRB staff. Population Reference Bureau Bulletin Vol. 41, No 2, January 1988.

"The Growing Human Population" by Nathan Keyfitz, *Scientific American*, September 1989.

Asia Region Population Projections 1988-89 by My T. Vu (WPS 115), World Bank, October 1988.

1989 World Population Data Sheet, Population Reference Bureau.

The Ultimate Resource by Julian Simon, 1981, Princeton University Press.

The Fear of Population Decline by Michael S. Teitelbaum and Jay M. Winter, 1985, Academic Press.

Facing Zero Population Growth by Joseph Spengler, 1978, Duke University Press.

PEOPLE... YA GOTTA LOVE 'EM!

©1989 by R. CRUMB

EEEYAAH

JEEZIZ, I HATE THOSE GUYS HAIR-DOS—

PHAW HAHA

SNICKER

QUIET!

MY LIFE IS OVER

IT'S THE GODDAMN JEWS

UH OH... I MADE EYE CONTACT WITH THAT GUY—NOW HE'S GONNA COME ON TO ME—

'EY VATO!

EASY THERE, PAL..

NO NO!

HI! MY NAME'S CHRIS! YOU ARE OBVIOUSLY AN INTELLIGENT PERSON...BUT DO YOU KNOW YOU CAN BE A MEMBER OF THE PRESTIGIOUS SMITHSONIAN INSTITUTE FOR ONLY 20 DOLLARS A YEAR!?

GET MOVING, WHATSA MATTA WITH YOU! GO!

WHAT AYA TRYIN' TO DO—KILL ME?

NO, I DON'T WANT TO—I'M—I'M IN A HURRY.. 'BYE NOW...

LET ME FINISH!

LET US THROUGH!

HALT

IT WASN'T ALWAYS THIS CROWDED... BELIEVE ME IT USE TO BE DIFFERENT..

OH, THEY SHOT SOMEBODY!

HE WAS A DRUG ADDICT..

BLAM BLAM!

EEEE

LOOK OUT FOR THE BLOOD! HE PROBBLY HAD AIDS!

MOVE!

LORD HELP US!

EEEK! TH'BLOOD GOT ON ME!!

AIDS!

AIDS! AIDS!

OH DEAR GOD!

EEYAAH!

HI BOB, HOW Y' BEEN GETTING ALONG?

HEY, JEFF! GOOD TO SEE YOU...I JUST WITNESSED A MOB PANIC OVER THE AIDS THING...

PEOPLE ARE A BUNCH OF DUM ASSHOLES, LET'S FACE IT...

YEAH, BUT Y'KNOW, THEY'RE AMAZINGLY CIVILIZED AN' RESTRAINED, CONSIDERING HOW PACKED TOGETHER WE ALL ARE...

☆◎✳!!

AH, THEY LOVE IT... THEY'RE JUST LIKE A HIVE OF INSECTS...IT MAKES 'EM FEEL SECURE TO CRAWL ALL OVER EACH OTHER...

'EY GARY, MAN!

HA HA MAYBE SO...

EXCUSE ME...

GIRL, YOU GOTTA BE TALKIN' SHEEIT...

NUH UH!

HEY BE CAREFUL IN THIS SECTION...THERE'S ALOTTA THEM THAT'D KILL YOU FOR A STINKIN' NICKEL, MAN...THEY'D JUST RATHER TAKE IT THAN GO TO ALL THE TROUBLE OF EARNING IT, THAT'S ALL...

WELL, THEY'RE IN A PRETTY HOPE-LESS SITUATION..IF YOU LOOK AT IT FROM THEIR ANGLE...

FUCK THEIR ANGLE... WHAT ABOUT MY ANGLE?! I GOTTA LIVE WITH THESE FUCKIN' ASSHOLES... TAKE CARE, BOB!

I'M TH'KING AN' RULER OF ALL!

KEEL THAT MUT FU

THESE PEOPLE ARE LESS RESTRAINED THAN THE WHITES, GENERALLY... ALSO THERE'S ALOTTA RAGE, ALOTTA ANGER—I HOPE THEY DON'T DECIDE TO TAKE IT OUT ON ME... WELL, SOON I'LL BE OUT OF THIS DISTRICT...

AWR

WHATCHOO DOIN' 'ROUN' HERE, MAN?!

SECURITY! SECURITY!

E-EXCUSE ME P-PLEASE

TRYING NOT TO SHOW HOW TERRIFIED I AM... SHOULDN'T A'COME THIS WAY...

THE COWARD DIES A THOUSAN DEATH

HI POP

I'M GETTING CLOSER... I CAN SMELL IT...

HEY THAT'S TERRIFIC, WENDY...

YEAH, SO NOW I GOT MY CON-TRACTOR'S LICENSE ...I'M GONNA BUILD A HOUSE ON SPEC'!

WHAT DOES "TRW" STAND FOR?

I DON' KNOW...

LET'S RENT A COUPLA VIDEOS...

AH! HERE IT IS! THE OCEAN!!

WHAT'S HE DOING?

HEY YOU'RE NOT GOING IN THERE?! THE TOXIC LEVEL IS UP TO 43 PERCENT NOW, YA KNOW!!

WHEW... I JUST NEED A COUPLE A'HOURS OUT HERE...THEN I'LL GO HOME...

A LITTLE ROOM TO BREATHE ....I'LL BE FINE...

WHAT'SA MATTER WITH THEM? DON'T THEY LIKE PEOPLE??

STOP SHOVING!

GRUNT

FART

★!#@!

"SURE AS SHIT THEY WILL MULTIPLY THEIR ASSHOLES INTO THE POLLUTED SEAS..."
—William S. Burroughs

END

THE AGE OF ENDARKENMENT

BY MICHAEL VENTURA

PART I: THE MOST IMPORTANT PIECE OF DATA WE HAVE

"ADOLESCENCE" is a cruel word — all the more because it hides its cruelty behind its vaguely official, diagnostic air. The word sounds as if it was invented by somebody part professor, part cop. It condescends, puts "adolescents" in their place. To say someone is an "adolescent," "going through adolescence," "being an adolescent," is usually to dismiss their feelings, minimize their troubles, and (especially if you're trying to be their parent) protect yourself from their uncompromising rage. The words "teenager" and "teen" are worse. They reek of cuteness — and hypocrisy. For we all know that, whatever else is true of being a "teen," it doesn't feel cute.

You will almost never hear *them* use these words. In my experience, they tend to call themselves "kids" when pushed, as in "What makes you think *you* know so much about kids, how many kids do you *know*, you sure don't know much about *me*!" Or they dress up and act out as though to give themselves other words: "punk," "gothic," "rapper," "gang-banger," "low-rider," "homeboy," "skinhead," "soc," "greaser," "hippie," "freak" — words to remind us just how volatile, how dangerous, how "freaked out," "radical," "bummered," "bitchin'," "groovy," "wasted," "awesome," "bad" those years really are.

When we don't have apt words for something it's because of an unspoken, forceful collective demand to avoid thinking about it. *That's* how scary "adolescence" is. Which is also to say: that's how scary our very own, private,

unspeakable adolescence was. And when we finally are past it (in America that often doesn't happen until we near 40) then we turn around and see the young and pretend that they are foreign to us, we don't know what they're going through, we don't understand their music, their fashions, their words, their codes. As somebody who has felt and said this (only yesterday!) I am writing to tell you that I think we are lying.

James Baldwin's line comes back to haunt: "One can only face in others what one can face in oneself."

What we cannot face, when we cannot face the young, is, plainly, ourselves. (And this is the song of families.) We cannot, do not want to, face our secrets, our compromises, our needs, our lacks, our past failures and the unspoken certainty (for we're old enough to know, now) that we're going to fail again. And that's only the stuff we *know* about ourselves, consciously — what about what we don't know, and don't want to know? All of it, especially what we don't want to know, stirs and starts to growl somewhere deep inside when adolescents look hard into a parent's eyes. It's as though, in some dark way, they are privy to all our secrets, they sense where it all is, and when the young so much as glance toward those parts of us, oh, then all our old panics resurrect, all the demons we thought we'd dealt with, grown out of, transcended, escaped — it only takes this goddamn kid, and the beasts awake. And we may measure our fear of them by the extent of our distance from that very kid.

But perhaps, when we love them, our greatest fear is: That we cannot help them, cannot protect them, and we have nothing real to give them. And their greatest rage is: That we cannot help them, cannot protect them, and we have nothing useful to give them.

When something is true of virtually everyone, it's unlikely that the fault is individual; but we feel and fear this mess as individuals, kids and grown-ups both, and they can't help but judge us for it as we can't help but flee their judgment.

All that we share with them, then, is an inner scream: *This isn't fair!* We *do* have useful things to give, if they would only take them — but they can't seem to. Individually, their refusal to take what we have to give, no matter how we try to give it, seems pernicious and willful; but when you look at them collectively, you see that they're obviously not in control of their refusal, they *have to* refuse us, no one knows why, even when their own refusal makes them secretly ashamed, which in turn makes them worse, which makes us worse. It seems that no matter what anybody does in America, the very act of raising the kids seems, at the onset of adolescence, to throw kids and parents into negative extremes.

In fact we've reached a point where we take this for granted.

"How old's your kid?"

"Fifteen."

"Oh my God."

It's as though the kids have a fundamental craving for negative extremes in their dealings with their parents especially and with adults in general — and will stop at practically nothing to invoke that negativity. And everyone has come (unofficially) to accept this fact.

All our models for dealing with these issues are psychological. Which is, frankly, absurd. You can't reduce a collective phenomenon, a phenomenon that cuts across every class and most countries, that has fundamentally the same elements in Harlem and Beverly Hills, at Woodstock and Tien An Men Square, in English soccer matches and Palestinian villages — you can't reduce a phenomenon like that to individual and family causes. To try to do so goes far beyond not making sense — it's to ignore *the* most important piece of data we have, which is the very fact that the same basic thing is happening everywhere to everyone.

As the mid-1990s come and go, and kids become the dominant population of most of the world, there'll be no way to ignore that data anymore.

PART II: THE INITIATORY MOMENT

Two writers, from very different disciplines, have described "adolescence" most tellingly for me.

North Americans were omitted in our worldwide survey of "Global Teenager" (p. 2). That essential, missing data is supplied by Michael Ventura, who writes in LA about twilight events, the dreamtimes of our scientific age. His most recent book is Nighttime, Losing Time.

The illustrations are by Jaime Hernandez, who with his brother Gilbert has created a legendary, larger-than-life "comic" serial called Love and Rockets. *Our typesetter James claims Los Bros Hernandez combine Latino mysticism in the tradition of Garcia Marquez with a splendidly unconventional soap-opera sensibility.*

Sample copies of Love and Rockets *can be had for $3 postpaid from Fantagraphics Books, 7563 Lake City Way, Seattle, WA 98115 (their catalog is free).* *All illustrations in this article copyright © 1989 Jaime Hernandez.* *—Kevin Kelly*

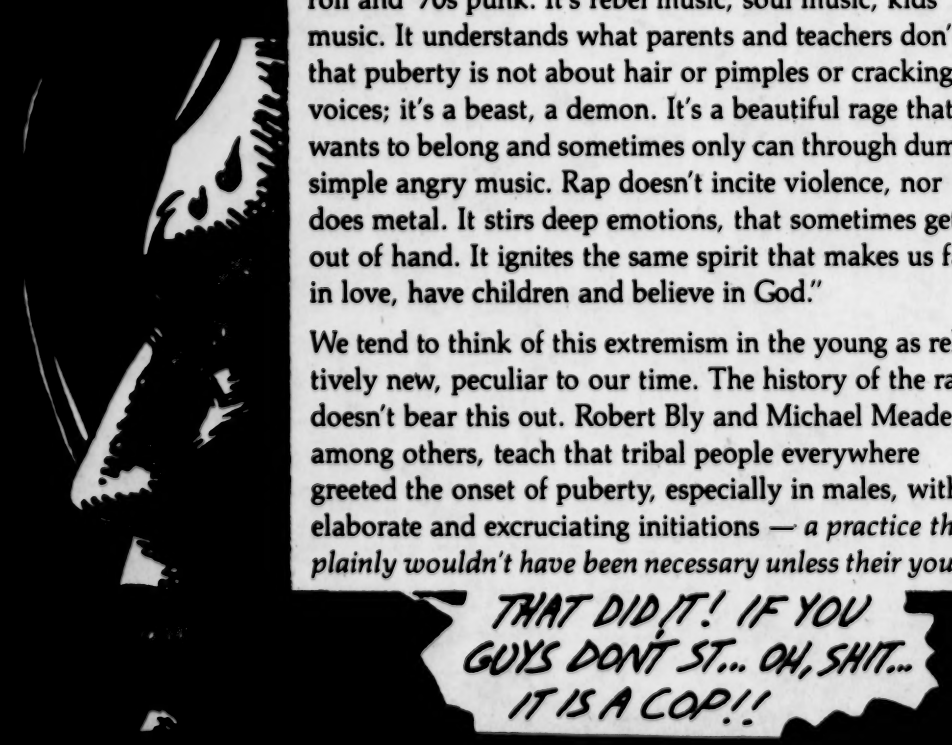
Educator Mike Rose in his crucial, though as yet critically ignored, *Lives on the Boundary* (The Free Press, Macmillan, 1989): "Kids have no choice but to talk in extremes; they're being wrenched and buffeted, rabbit-punched from the inside by systemic thugs."

A thought elaborated by rock critic Michael Corcoran, writing in *The Austin Chronicle* a year or so ago: " . . . rap and its polar opposite, but sometime bedfellow, heavy metal, is the '80s counterpart to '50s rock and roll and '70s punk. It's rebel music, soul music, kids' music. It understands what parents and teachers don't, that puberty is not about hair or pimples or cracking voices; it's a beast, a demon. It's a beautiful rage that wants to belong and sometimes only can through dumb, simple angry music. Rap doesn't incite violence, nor does metal. It stirs deep emotions, that sometimes get out of hand. It ignites the same spirit that makes us fall in love, have children and believe in God."

We tend to think of this extremism in the young as relatively new, peculiar to our time. The history of the race doesn't bear this out. Robert Bly and Michael Meade, among others, teach that tribal people everywhere greeted the onset of puberty, especially in males, with elaborate and excruciating initiations — *a practice that plainly wouldn't have been necessary unless their young were as extreme as ours.* But, unlike us, tribal people met the extremism of their young (and I'm using "extremism" as a catch-all word for the intense inner cacophony of adolescence) with an equal but *focused* and *instructive* extremism from the adults.

The tribal adults didn't run from this moment in their children as we do; they celebrated it. They would assault their adolescents with, quite literally, holy terror; rituals that had been kept secret from the young till that moment — a secrecy kept by threat of death, so important was this "adolescent moment" to the ancients; rituals that focused upon the young all the light and darkness of their tribe's collective psyche, all its sense of mystery, all its questions and all the stories told to both harbor and answer those questions. Their "methodology," if you like, deserves looking at, since these societies lasted with fair stability for at least 50,000 years.

The crucial word here is "focus." The adults had something to teach: stories, skills, magic, dances, visions, rituals. In fact, if these things were not learned well and completely, the tribe could not survive. But the adults did not splatter this material all over the young



from the time of their birth, as we do. They focused and were as selective as possible in what they told and taught, and when. They waited until their children reached the intensity of adolescence, and then they used that very intensity's capacity for absorption, its hunger, its need to act out, its craving for dark things, dark knowledge, dark acts, all the qualities we fear most in our kids — *the ancients used these very qualities as teaching tools.*

Through what the kids craved, they were given what they needed. Kids of that age crave extremes of experience — they crave this suddenly and utterly, and are possessed by their craving. They can't be talked out of it or conditioned out of it. It's in our genetic coding, if you like, to crave extremes at that age. (So they must certainly feel rage if, as in our culture, adults tell them that these cravings are *wrong, disruptive,* and/or don't *really* exist — which New Agers do as surely as Victorians.) At the same time, these kids *need* the cosmology and skills apt for survival in their world. The kids can create the extremes for themselves — they're quite good at it; but not the cosmology, not the skills. And *without* those elements, given at the proper time through the dark-energy channels that have suddenly opened in the young and go clear down to their souls, the need for extremes is never really satisfied in its *purpose,* and hence it goes on and on.

Tribal cultures satisfied the craving while supplying the need, and we call that "initiation." This practice was so effective that usually by the age of fifteen a tribal youth was able to take his/her place as a fully responsible adult. Because our culture denies the craving, we can't possibly meet the need — so most of us never truly grow up or feel, in our heart of hearts, adult. Of course, we have an infinitely more complex, fragmented world to pass on to our young — a world that can't, in fact, be "passed on" because it's still in the process of inventing itself, furiously, mercilessly, every day, every hour. So how have the young responded? For about forty years, now, they have generated forms — music, fashions, behaviors — *that prolong the initiatory moment.* I.e., that cherish and elongate adolescence — as though hoping to be somehow initiated by chance somewhere along the way.

For tribal people the initiatory moment was by far the most intense period of life, and lasted usually no more than weeks, at most about a year. For us, it now can stretch into a couple of decades. And, in a kind of negative feedback system, the pressure to make it last decades makes it more and more violent at the outset.

This very extension of the initiatory moment is helping to drive everybody mad.

PART III:
OUR INITIATORY ENVIRONMENT

For tribal people, initiations were the most crucial, pivotal ceremonies of life. Ceremonies into which all other tribal life was compressed, and, at the same time, from which the life of the tribe was derived. The seed-time. The fact that we've prolonged that initiatory moment for decades is a psycho-active element in our era that is hard to underestimate.

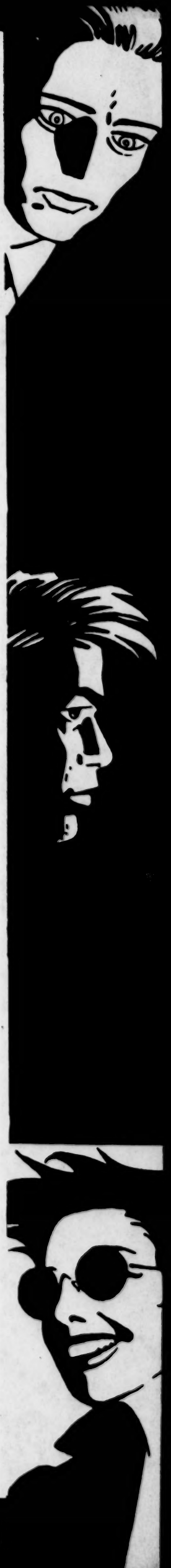
But why is this a late-twentieth-century phenomenon? Tribal life ended in Europe a thousand years ago. Why hasn't this been going on, then, for at least a thousand years?

Before the Second World War, it was as though we were between worlds. The pre-war world, going back at least several hundred years, was deeply repressive and viciously exploitive — but orderly. At least, orderly enough (certainly when compared to today) — orderly enough so that the repression upon which it was based could be enforced. Initiation didn't happen, hadn't happened in the West for a long time; the dark craving-period in the young was most often utterly squashed, such that it turned in on itself, creating in individuals a kind of deadness, a stiffness that became *adulthood, maturity.* By the age of 17 or so the effects of a repression from which there was virtually no release or escape had made most people rigid enough to assume the responsibilities society demanded. It was a rigidity that passed (and, in our nostalgia, still passes) for strength, a sort of lifeless life, where one did one's duties and made a virtue of stoicism. Whether or not people felt particularly alive, they got things done. And certainly there was something to be said for that.

Every now and again there would be a burst of revolution against this, usually expressed politically — but that was nothing new, there'd been such bursts for hundreds of years. They were short-lived and things returned to "normal" quickly. Even the French Revolution made comparatively small headway (small in relation to its scope and violence) against the general repressiveness.

America was a special case — till roughly 1900 it had a frontier where the rules didn't apply, which in turn kept its more "civilized" sectors agitated. That's why most of the innovations that *became* the twentieth century — cars, lightbulbs, radios, motion pictures, radioactivity, even democracy itself — became institutions here first, no matter where they originated. By contrast, the European countries had their frontiers, their colonies, safely distant from their centers. Those countries could exploit their artificial frontiers economically without changing as much socially. America, organically connected to its wild places, couldn't do that.

But somehow the Second World War unleashed new energies. (The *real* collective reason for the war, Thomas Pynchon suggests in *Gravity's Rainbow,* was precisely for the final burst of these slowly pent-up energies.) The energies were expressed technologically, but we forget that technology is an *expression* — it's an effect before it's a cause. In any case, those unleashed energies made enforcement far less of a sure thing. On a family level, enforced repression soon became impossible in the West — as it is now becoming everywhere. But we know now that enforcement became problematic even in the most repressive countries. What, for instance,



would have happened to Mao if he *hadn't* managed to harness that energy in the young for his own ends in China — if, that is, they *were* his own ends, if he wasn't just making the best, his best, of a critical situation. Mao perhaps *directed* the energy of the "Cultural Revolution," but it is not within human capacity for one person to *create* such energy.

The fact is that all over the world, the children born during and just after the Second World War hit "adolescence," the initiatory moment, with a vengeance, in virtually the same way, with negative and positive poles of the same phenomenon, virtually everywhere. *Please* don't try to explain that to me with the psychology of individuals or the economics and politics of what were then still separate societies. Something far more mysterious, laws of human behavior we haven't begun to differentiate, appear to have been in play.

So the effect of the Second World War on the young was that the craving-period, the initiatory moment, could no longer be squashed. Adults could hardly keep up with the changes in their *own* lives, much less police their children's. What had happened only among the very privileged (rich whites) or the disenfranchised (blacks) in the twenties, was now going on everywhere: the young were generating forms — music, fashions, and customs — that had the effect of prolonging the initiatory craving-period. Just because that result wasn't conscious doesn't mean it wasn't intended. Instinct isn't conscious, but it has definite, specific purposes.

This phenomenon, or complex of phenomena, multiplied geometrically every year, it seemed, until now the dark-tinged craving-period we choose to call "adolescence" has literally *become* the cultural air we breathe. And while it's true that most of these forms are now corporately controlled, they originated from the bottom up, they were spontaneously generated by young people — and the corporations that now control many of them are run by people of that first generation of these unleashed young. The result is that, under the guise of entertainment (music, movies, television), a sense of adolescent volatility is now enforced the way the image of "mature" rigidity once was.

Of course, this has gone hand-in-hand with the population explosion. Cause and effect get awfully muddled here. (The very notion of cause and effect probably won't be with us much longer.) The population explosion and the prolonged craving-time seem causes and effects of each other. And the situation, with all its causes and effects marinating each other, has become this:

The world has become adolescent. Chaotic "teenage" intensity, dark-tinged extreme experience, is business as usual, the stuff of everyday life. (Something once tolerated only in artists — for what has being an "artist" meant, in the West, but prolonging the initiatory moment? Filtered through the disciplines of art, artists deal with much the same material that the ancients taught in their rituals — and that is no coincidence).

The way that tribal people treated this period in their young was to expose them, through precise ritual, to what the Australians call "the dreamtime" — the psyche's mysteries in their rawest form. And that is what this world cultural environment, structured by the priorities of adolescence minus the in-*struc*-tion of fully initiated elders, is doing: it's exposing everybody to the mysteries of the psyche in their most raw acted-out forms.

By the mid-1990s half the world will be "teens." Half the world will be in that natural, unavoidable state of craving extreme and dark experience while, at the same time, demanding the structure of instruction — instruction that no one can give on such a scale. And if it can't be done by the family or the community, where can they turn but to the larger collective? Hence their demand — inchoate, unreasonable, and irresistable — is that history initiate them.

History itself.

What a ride.

For we've already seen what happens when this nonverbal and unconscious demand of youth is acted out in the sphere that we usually call history. It was attempted briefly in America during that time we label "the sixties." And in France, in '68; in Czechoslovakia during the "Prague Spring"; in China during the Cultural Revolution and, more recently, in Tian An Men Square. It's still going on in Palestine, while in Europe the impulse has birthed the Greens, in Russia "perestroika." (You can't credit mass events to one man, as Tolstoy so brilliantly diagrammed in *War and Peace* — even if he's Gorbachev.) It happened in Cambodia — where what mostly happened, if you strip the political

lingo from it, was that the kids murdered the grown-ups. And the prolongation of the initiatory moment has everything to do with why there's such a massive drug market in the United States. And it will keep on happening, more and more, eveywhere, until —

Until what? That *is* the question, and nothing but history can answer it. There's no going back. In many tribal initiations, if you don't pass you die. We don't know what will satisfy the demands of this massive, unprecedented attempt at initiation, or if it can be satisfied. But we can guess the consequences if it can't.

And yes, of course: no one phenomenon can supply the entire context of what's happening to us all. But I have no doubt that this unconscious, compulsive prolonging of the initiatory moment into decades — is at the crux of our fate.

PART IV: NEW YEAR'S EVE

We live in a culture where individuals and institutions behave as though convinced that, even though they're acting much like everybody else, the source of their behavior is confined to *their* psyches, *their* families, their confined personal worlds. (I am not saying that to peer into your personal psychology is a worthless activity; it can be crucial for growth. But it's not the whole story and it may not even be the half.) We have no coherent way to think collectively — at least no way that's not reductive, and, therefore, personally insulting. Our inner darkness is something to be processed, "shrunk," transcended, individuated, got rid of; while our inner light is diluted into Christian or New Age platitudes. This renders incomprehensible such words as these of the Greek poet George Seferis: *"I watched you with all the light and darkness I have."* Instead our light and darkness tend to come out in their most strident forms — drugs, guns, cults, and brutal (punk) or sickly sweet (New Age) sounds.

Still, we all have moments that escape these strictures.

For me, one of those moments happened a while ago, when I was living with a woman and her thirteen-year-old son. Later I would lose them both, through all the reasons that you lose people these days. But there *was* this one night, and it's worth telling as a coda to this web of thoughts.

It was New Year's Eve. They had gone to a party. I hadn't felt like it. They got back well past midnight. I had waited up for them. They were telling me about their evening — when the boy suddenly (and this wasn't "like" him) started to sob. When we asked him why he burst out with, "Everything is so *fucked*, it's all so *fucked*, what's the point, it's all so fucking *fucked*."

I loved — and love — that boy. So I wanted to comfort him, to tell him things weren't that bad, it would all be all right — but it was no time to lie. What I said to him, straight into his eyes — and he seemed to get it, that one night, and I pray often, *often*, that he'll remember it — was this:

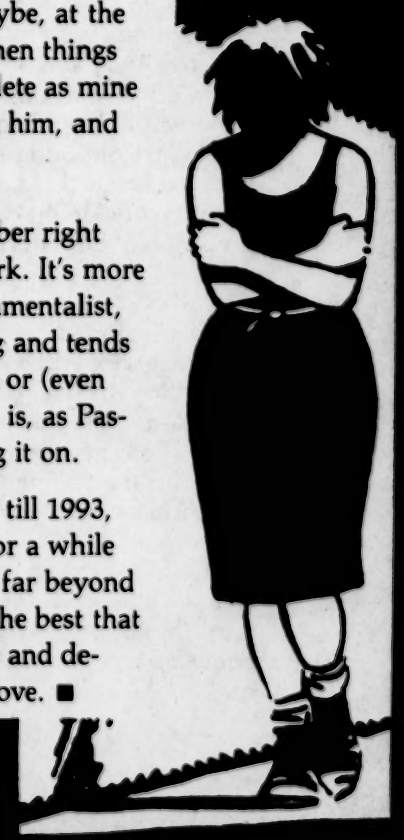
That we are living through a dark age. An age, if you like, of "endarkenment" — and I don't necessarily mean that negatively. The world is aflood with dark psychic fluid, everything's stained with it. We all say we hate the stuff, but we don't act that way, we splash in it. It's an age in which, for reasons we can't comprehend, everything's being turned inside out, everything's imploding and exploding at once, and we can't stop it. And it's going to continue, it'll go on for a long, long time, longer than we're going to be alive. So we can't find peace, we can't "win," it's *not* going to be all right. Not for us. But that doesn't have to rob us of purpose; in fact it's the opposite, it implies a great purpose: That what each of us must do is cleave to what we find most beautiful in the human heritage — and pass it on. So that one day, one day when this endarkenment exhausts itself, those precious things we've passed on will still be alive, stained perhaps but functional, still present in some form, and it will be possible for the people of that day to make use of them to construct a life that *is* a life — the life of freedom *and* variety *and* order *and* light *and* dark, in their proper proportions (whatever they may be). The life that we'd choose now if we could.

And that to pass these precious fragments on is our mission, a dangerous mission — that if you were going to volunteer for crucial, hazardous work, work of great importance and risk, this might be the job you drew. And it isn't a bad job at all. Actually, it's the best job. And his mother, and me, and our friends — "And you too, man," I said, "I can see it in your eyes" — that's what we're doing here. Trying to do. And it's no small thing, it's the best, man, it's one of the few things left to be proud of.

Later everything went wrong — we have to expect that, now; *we* imploded and exploded too, like everyone and everything else, and sure, sure, it was because of our childhoods, but it was also because that's what's happening to everyone right now, that's the initiation — or that's part of it, the worst part. Still — I know he got it that night, because it was all in him in the first place, I just put words to it (which is all writers do anyway, it's *all* there in the first place). Maybe, at the end of his long, long, and, as it must be when things are this way, incomplete initiation, incomplete as mine or yours — then maybe it'll still be there in him, and he'll find his part of the work too.

Maybe the most important thing to remember right now is that many people are doing this work. It's more public in a writer or an artist or an environmentalist, but anyone who loves something life-giving and tends it — to garden, or to read, or to brew beer, or (even this is becoming lost) to take long walks — is, as Pasternak put it, keeping *life* alive, and passing it on.

For the reality is that we don't have to wait till 1993, we have been in a teenage initiatory state for a while now, and it'll go on for a long while more, far beyond anyone's ability to predict or control, and the best that we can do is to try to endure its cacophony and decipher its purpose while we tend what we love. ■



The New Realities

This is Peter Drucker's field guide to the large-scale paradoxes of our time.

Drucker's gift to readers has always been helping us view the concerns of mainstream (corporate) management in light of the concerns of civilization, and vice versa. Here he's driven by everyone's need to understand the worldwide changes of 1973, prodded by the "floating dollar," the student rebellions, and the energy crisis. Casualties of that change include not merely labor unions, but the cultural distinction between workers and managers; not merely the Cold War, but the economic benefits of armaments; not merely urban renewal, but the idea that government can shape society; not merely U.S. exports, but economic boundaries everywhere.

Unfortunately, the book reads like it was hurriedly written; some of the most intriguing insights (like the value of infrastructure in giving dignity to everyone) get tossed of in a line or two. But that makes them all the more important; as Drucker says, "It will take a century or so before we have legal and political doctrine appropriate to the realities . . ." For that reason, he eschews his traditional audience (corporate managers) and addresses policy-makers: local, regional, national, international. I suspect that this audience includes more and more readers of this magazine; indeed, the broadening of responsibility for the public good (in some unexpected ways) is one of Drucker's "new realities." —*Art Kleiner*

•

There are some things government, by its very essence, cannot do. And even for the things government can do, conditions must be right. A government activity can work only if it is a monopoly. It cannot function if there are other ways to do the job, that is, if there is competition. The Post Office in the nineteenth century was a true monopoly. And so were the railroads. There were no other ways of sending information or of moving freight and people over land. But as soon as there are alternative ways to provide the same service, government flounders.

•

In the developed countries both society and polity have become pluralist again, in startling reversal of the trends that prevailed since the end of the Middle Ages. These new pluralisms are very different from anything known earlier. The pluralism of society is one of apolitical, performance-focused, single-task institutions. The pluralism of the body politic is that of the new "mass movements": small, highly organized minorities, single-cause or single-interest in their focus, and totally political.

•

In the early months of the Kennedy administration, I joined an advisory board to the Secretary of Defense on procurement and personnel, on which I served for nine years, almost to the end of the Vietnam War. The members of the board — three distinguished business leaders, three former high-ranking military officers, three academics like myself — were hardly "anti-military." Yet by the time he left the board, each of us had reached the same conclusion: arms had become counterproductive, even militarily. And the same conclusion, it was clear to all of us, had been reached by the military officers with whom we worked. Yet the arms buildup worldwide has only speeded up since then.

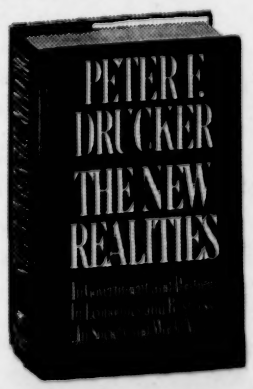
•

The last of the colonial empires, Russia, has entered the final phase of decolonization. Whatever succeeds, it is unlikely to be either "Russian" or "Empire."

•

Economic theory still assumes that the sovereign national state is the sole, or at least the predominant unit, and the only one capable of effective economic policy. But in the transnational economy there are actually *four* such units. They are what the mathematician calls "partially dependent variables," linked and interdependent but not controlled by each other. The national state is one of these units; individual countries — especially the major, developed, non-Communist ones — matter, of course. But increasingly decision-making power is shifting to a second unit, the region — the European Economic Community; North America; tomorrow perhaps a Far Eastern region grouped around Japan. Third, there is a genuine and almost autonomous world economy of money, credit, and investment flows. It is organized by information that no longer knows national boundaries. Finally, there is the transnational enterprise — not necessarily a big business, by the way — which views the entire developed non-Communist world as one market, indeed, as one "location," both to produce and to sell goods and services.

The New Realities
Peter F. Drucker, 1989; 276 pp.
$19.95 ($21.45 postpaid) from Harper & Row, Rt. 3/Box 20B, Hagerstown, MD 21740; 800/638-3030 (or Whole Earth Access).



•

Investment used to follow trade. Now trade follows investment.

•

Most people think of giant companies when they hear the word "transnational." But increasingly middle-sized and even small businesses operate in the world economy rather than in one or two countries. It is actually easier for the middle-sized and even for the small company to operate without much regard for national boundaries. Unlike large companies they are politically barely visible.

•

In any system as complex as the economy of a developed country, the statistically insignificant events, the events at the margin, are likely to be the decisive events, short range at least. By definition they can neither be anticipated nor prevented. Indeed, they cannot always be identified even after they have had their impact.

•

As a result of the success of business, the capitalist has become economically almost irrelevant in developed countries. He has both far less economic power and far less political power than he had before World War I. Then, great businessmen — a John D. Rockefeller, a J. P. Morgan, an Andrew Carnegie, an Alfred Krupp — could finance entire industries out of their own pockets. They were indeed Marx's capitalists, who own and control the means of production. The total wealth of America's one thousand richest people today (according to figures in the September 8, 1988, *Fortune* Magazine) would barely cover the capital needs of one major American industry for a few months. The employees through their pension funds are now the capitalists. Indeed, no one today, not even the fattest oil sheik or the richest Japanese real-estate billionaire, has as large a fortune (adjusted for inflation and taxes) as had each of the "tycoons" of 1900. If all the "super-rich" of the developed countries suddenly disappeared, the world economy would not even notice. They have become "media events" whose comings and goings are featured in the gossip column rather than on the financial page. Economically, they have become irrelevant.

•

The shift to knowledge and education as the passport to good jobs and career opportunities means, above all, a shift from a society in which business was the main avenue of advancement to a society in which business is only one of the available opportunities and no longer a distinct one. *It represents a shift to the post-business society.* The shift has gone furthest in the United States and Japan, but it is also in train in most of Western Europe.

The Ultimate Resource

This book refutes what "everyone knows" about the population bomb and environmental degradation. It is a refreshing view, especially with regard to the importance it places upon human imagination.

*As I kept hemming and hawing and grumping at Simon's continued assertions against all of my apocalyptic visions, I remembered B. Fuller's remark that the human brain is the only syntropic organism in the universe. (**CQ/WER** has been backing "Gaia" as another.)*

Simon did not speak directly to one point of grave concern: the depletion of the gene pool. But indirectly, he repeats that with more brains (which come with people) we can solve that as well. My view is with him, to my surprise. Just as we are defeating the spoils of pollution, we can — and are — reducing consumption and thus the environmental pressures.

*Simon reminded me that we've all got brains and are using them. He supports contraception and family planning but fears coercion, including population propaganda based on bad science (**The Limits to Growth**, zero population growth, etc.).*

He comes from an economics background, which I personally find disappointing, but he makes me sit up and listen despite my bias. He further enhances his credibility by pointing out that he had begun his population studies with the aim of adding his voice to the anti-natalists. But on scientific grounds he found he couldn't support them.

For all the good humanitarian and planet-loving reasons that we stopped having children, we ought to reconsider. I'm amazed at myself.

—David Wesley Grant

•

Paradoxically, a greater population density leads to *less* chance of famine. The concentration of population causes better roads and transportation, and better transportation is the key factor in preventing starvation.

•

Another common misleading impression about world population is that a large proportion of all the people who have ever lived are alive now. This is very far from the truth. A well-thought-out estimate is that 77 billion human beings were born from 600,000 B.C. to 1962 A.D.: 12 billion up to 6000 B.C., 42 billion from 6000 B.C. to 1650 A.D., and 23 billion from 1650 A.D. to 1962 A.D. Compare this to the 4-5 billion who may be alive now. Of course many of the people born in earlier years died at young ages. But even so, the number of years of human life lived on earth in the past was large relative to the present.

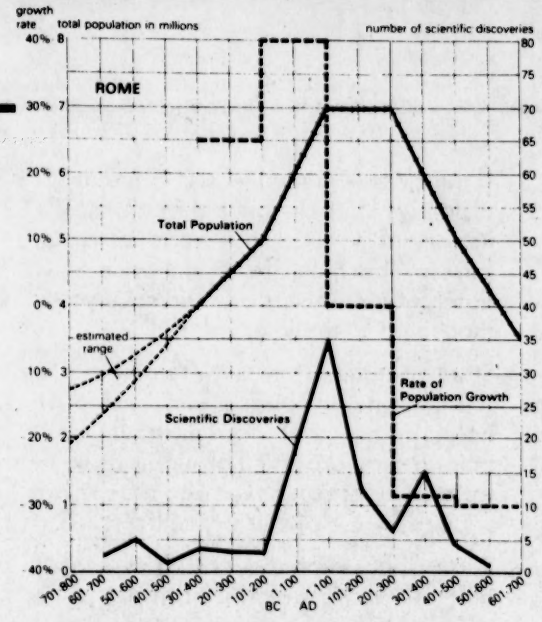


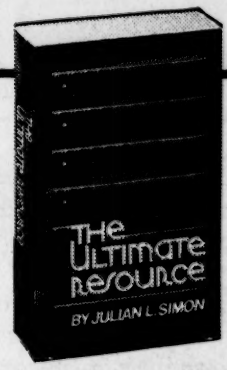
FIGURE 14-1b. Population and Scientific Discoveries in Ancient Rome

•

Population growth is responsible for great improvements in the social infrastructure, especially in transportation and communications, which are crucial to economic development.

•

There is no persuasive reason to believe that the relatively larger use of natural resources that would occur with a larger population would have any special deleterious effects upon the economy in the future. For the foreseeable future, even if the extrapolation of past trends is badly in error, the cost of energy is not an important consideration in evaluating the impact of population growth. Other natural resources may be treated in a manner just like any other physical capital when considering the economic effect of different rates of population growth. Depletion of mineral resources is not a special danger for the long run or the short run. Rather, the availability of mineral resources, as measured by their prices, may be expected to increase — that is, costs may be expected to decrease — despite all notions about "finiteness."



The Ultimate Resource
Julian L. Simon, 1981; 415 pp.
$9.95 postpaid from Princeton University Press, 3175 Princeton Pike, Lawrenceville, NJ 08648; 800/777-4726 (or Whole Earth Access).

Discos and Democracy

Nearly a world unto itself, China is like an old planet learning new tricks. It is presently trying to turn itself inside-out without taking its padded blue vest off. The political and social contortions it goes through are quite befuddling, and massive. When China wiggles, the rest of the world shudders. You'll find that Orville Schell's newest study of China deciphers the logic behind these revolutionary throes. (Schell first went to China in 1961, lived on a factory commune, and has reported regularly in this magazine on each stage of China's transformations.) Although written before the Tienanmen Square student massacre of June 1989, there's nothing in print that explains that event so well. As the title hints, it is the Chinese youth (and there are zillions of them) who are in the center ring of this worldwide act.

—Kevin Kelly

•

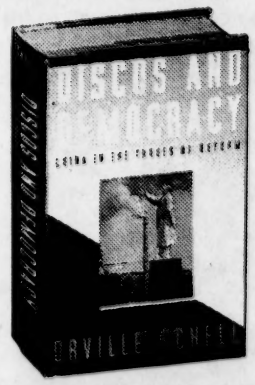
Before the government quite realized what was happening, and before the Party had been able to hold any kind of real debate about the appropriateness or advisability of a socialist people's republic selling ownership shares in its enterprises, the idea of stocks and bonds had swept the country. . . .

By the middle of 1986, [Shenyang] boasted 114 state-owned and 338 private-collective enterprises that had already issued shares and bonds totalling some 354 million yuan. This — and similar situations in other large cities — added up to a vibrant, chaotic, and largely unregulated new securities market.

•

A testimonial to disco, carried by the New China News Agency from Shenyang, was entitled "Dancing Helps Old Folks to Feel Young Again." "I was so depressed I thought that there was no point in living and that I would soon die," it quoted a retired worker from the Shenyang No. 3 Machine Tools Plant as saying. However, after attending several of the dance hall sessions at the Xiaobaihua Dance Hall, which opened at the unusual hour of seven-thirty every morning, he declared himself reborn because he had found "a wonderful new pastime in dancing . . . (and) made new friends."

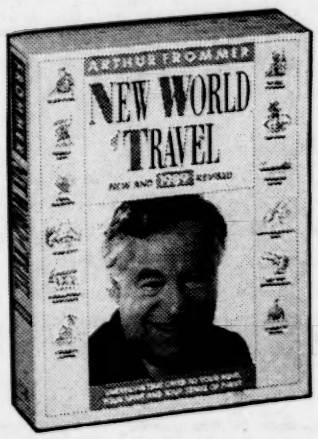
Discos and Democracy
Orville Schell, 1988; 384 pp.
$19.95 ($21.45 postpaid) from Random House Inc., 400 Hahn Road, Westminster, MD 21157; 301/848-1900 (or Whole Earth Access).



New World of Travel 1989

There are thousands of travel books in print. I wouldn't be exaggerating much to say I've seen them all. This is the only one of them that has lots of tricks and savvy tips new to me. It's a menu of alternative, rewarding traveling possibilities, by the guy who invented "Europe on $5 a Day" in the 1950s. Mostly it's about practical and inspirational ways to go, and not about what to see. For the past several years Whole Earth has wanted to do a Whole Earth Travel Catalog. Now we don't have to. This book did it, and did it superbly.

—Kevin Kelly



New World of Travel
Arthur Frommer, 1989; 380 pp.
$14.95 ($16.45 postpaid) from Simon & Schuster/attn.: mail order, 200 Old Tappan Road, Old Tappan, NJ 07675; 800/223-2336 (or Whole Earth Access).

•

If the class — ahem! — will come to order, we shall discuss the single most important skill in all the world of travel; how to "bargain down" the price of hotel rooms. That talent can save you thousands in the years ahead.

Start from the premise that nothing in this life is more "perishable" than a hotel room. If such a room should go unrented on a particular night, its value for that night can never again be recouped by the owner of the hotel.

Accordingly, it behooves that owner to rent the room for almost any price rather than leave it unoccupied. Why? Because the cost of placing a guest in the room, as opposed to keeping it empty, is measured in terms of a dollar or two: a change of towels and sheets, a bit of electricity, a cake of soap. A reduced (but still a reasonable) amount of room income is therefore better than no income at all.

Such reasoning has led smart hoteliers the world over to authorize their front-desk clerks to respond favorably to requests for discounts, if that should be what's needed to fill rooms on a slow night. And every nationality of traveler the world over is aware of their willingness to do so, and therefore bargains — except the American.

Cottages: a new weapon in the arsenal of budget travel. Costing far less than a villa or apartment rental, they also house you in areas unaffected by mass tourism.

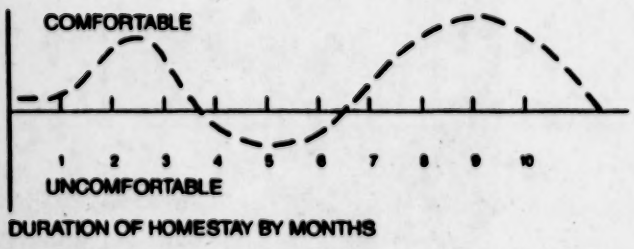
Host Family Survival Kit

Welcoming a foreign student to stay in your home is an invitation for significant cultural shock that blasts both ways. Hosts get it worse than guests because they are rarely ready for it. But the inevitable education and joy go both ways, too, once you both are over the predictable stages. I've been the host of many, many exchange students and refugees, and this book tells it like it is. I recommend both the experience and reading this book beforehand.

—Kevin Kelly

•

Many foreign exchange students are from large cosmopolitan centers and sometimes encounter surprises of a different kind. They expect to find U.S. towns and communities that are bustling with activity, equipped with modern rapid transit systems, and futuristic in outlook and design. They are not prepared for the fact that many host families enjoy a slower-paced, small-town atmosphere or the simplicity of a tranquil farm community.



Host Family Survival Kit
Nancy King and Ken Huff, 1985; 116 pp.
$8.95 ($9.95 postpaid) from Intercultural Press, Inc., P. O. Box 768, Yarmouth, ME 04096; 207/846-5168 (or Whole Earth Access).

•

Atypical Behavior. When culture shock begins, host families sometimes wonder if someone switched students on them. That person who was so friendly and outgoing can turn sullen or cling like a frightened child. It can be quite disturbing to try reasoning with someone who over-reacts, under-reacts, makes harsh judgments, isn't logical or has scaled the pinnacle of stubbornness by insisting absolutely, "I'm NOT going through culture shock!"

•

You may not find an easy answer or quick escape when asked questions such as the following:

— Why do you watch so much TV and stuff yourself with junk food from fastfood joints?

— What are you doing to eliminate poverty and racism in the U.S.?

— Why are you so hung-up about free love?

— If the baseball playoffs are between two American teams, why do you call it the World Series?

— Since the U.S. has only 12% of the world's population, what gives it the right to consume nearly two-thirds of the earth's natural resources?

Music camp, 1989.

Creating Our Future

Social-change activism for high-school-age teenagers here. Unlike colleges, where groups of every flavor abound, opportunities beyond officially sanctioned high-school activities are often non-existent. Started in 1987, Creating Our Future facilitates the organization of social-change groups in high schools. Issues are up to local members, but at different schools in California have included rainforest destruction, the homeless, and offshore oil-drilling. Activities range from public-education and letter-writing campaigns to (in San Francisco) arrest following nonviolent protest of rainforest timber policies at the offices of the Japan External Trade Organization. In addition to a basic how-to manual, the group also runs an annual summer camp in California.

—Richard Nilsen

Creating Our Future
Information **free** from 398 N. Ferndale, Mill Valley, CA 94941.

Youth News Service

*News by and about teenagers. A dozen YNS bureaus around the country train youth correspondents, many of them minorities, to report on teenage issues in a professional way. The students' stories are sent to 300 subscribing high schools which are free to publish them in their school papers. The service also issues a fairly decent handbook for the student press called **Covering the Global Village**. Nice work, kids.*

—Kevin Kelly

Youth News Service
Marie White, Editor

$76 (special rate for school newspapers); **$99** (commercial newspapers) from: YNS, 2025 Pennsylvania Avenue NW/Suite 1015, Washington, DC 20006; 202/429-5292.

Asiaweek

*There is no publication in the US that covers Asia to the extent that **Asiaweek** does. Along with **The Asian Wall Street Journal** and the **Far Eastern Economic Review**, **Asiaweek** is written and produced in Hong Kong. Unlike the other two, **Asiaweek** covers a broader range of topics: not just economics, but social, artistic, cultural, government, and sports concerns, to mention a few. **Asiaweek** gives weekly news an Asian view, written by Asians who can interview people in their own language. By the way, **Asiaweek** has recently been bought by Time Inc. Although I have been reading it since it was formed in 1975, I can find no "Time-style" writing or reporting since Time took over.*

—Elliott Parker

Asiaweek
Michael O'Neill, Editor.

$102/year (51 issues) from Asiaweek Limited, 13th Floor South, Somerset House, 28 Tong Chong Street, Quarry Bay, Hong Kong.

Quezon City making examples of smokers who flouted the law: Growing Asian resistance to a pervasive weed.

Main Street America and the Third World

Local news is news and foreign news is foreign, went an old adage of American newspaper editors. Not any longer. The mission of this book, originally written for newspaper reporters, is to challenge that assumption and show that all the lessons of global interdependence can be covered from, and on, Main Street, USA. Presently, there are vivid international connections threading into nearly every shop and business in just about every American town, if one will look. Good stuff for student journalism, economics, and civics classes. —Kevin Kelly

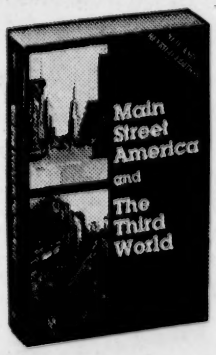
[Suggested by Bill Siemering]

•

A global news work force has begun to take shape. In October 1987, the Cable News Network broadcast its first global newscast. In the first months CNN aired stories by reporters from 70 different countries. "Foreign journalists are bidding for the assignments that generations of American reporters have dreamed of getting," noted media observer Scott Shuster in 1988. In that same year, the Cartoonists and Writers Syndicate began to offer American publications humor cartoons from over 20 countries, including the Philippines, Taiwan, and Argentina. In the mid-1980s the Associated Press earned about 3.5 percent of its annual revenue selling services in Third World countries, and it has news exchange arrangements with about 20 developing country press agencies.

Main Street America and the Third World
John Maxwell Hamilton
1988; 220 pp.

$10.95 ($12.95 postpaid) from Seven Locks Press, P. O. Box 27, Cabin John, MD 20818; 800/537-9359 (or Whole Earth Access).



The Question Machine

BY MICHAEL NAIMARK

A COUPLE OF YEARS AGO, on a sudden impulse, I disappeared for one week to visit the Ifugao culture deep in the northern mountains of the Philippines. At the time I went, it was easy for an American to visit the Philippines; no visa for short stays, no shots required in the springtime, relatively cheap airfare, and plenty of local bus transportation. Two sleepless days after arriving in Manila I was at the hut of Dionicio Damoyan Immatong, a 66-year-old Ifugao shaman.

The Ifugao was nominated by several anthropologist friends as the culture most extreme from ours where many of the people speak English. This minority group is best known for their rice terraces and wood carvings. Their language is oral, not written: prayer, poetry, music, and legend are passed down through word of mouth. Until quite recently, the Ifugao were headhunters. I went with a letter of introduction to Dionicio, and stayed with him and his family.

I had been spending much time thinking and conducting research on new media technologies that are probably inevitable — a machine that will understand spoken language, for one example. You can talk to this machine; it will speak back, or perhaps show you some pictures, text, or movies. It's the type of machine that a child could walk around with on a beach, point at something, and ask "What's this?"

But as the technologies making all this possible become powerful they also become invisible. Our culture has become locked into a particular way of thinking and accepting what is natural and what is real. I had come to the Ifugao to get a Second Opinion. By the light of a single candle in Dionicio's hut we sat, passing the betel nut, and discussing information and media. "Where is your information and how do you get it?" We talked about information from books, from the land, from newspapers and from shamans.

Dionicio and his family live in a compound of two huts, a short walk up from the main town of Banaue. We would get up at dawn, and Dionicio would lead me on tours of the area. He would describe why I was there to other Ifugao — to learn where they go for answers, what their other realities are, and what kind of questions they ask. A machine that can answer questions, many Ifugao say, will be a very good thing.

I met Patrick Tundagui when I arrived in Banaue. He is a twelve-year-old Ifugao boy living in the village of Paypayan, a short walk from Banaue. His father teaches in the elementary school and his mother works in the rice terraces. He has two brothers and five sisters; many other relatives live in neighboring homes. Patrick gives tours of the rice terraces to earn money for tuition to the public school. He is in his first year of high school.

I tell Patrick that I'm trying to understand questions and that I would like him to record every question of which he thinks. There are no correct questions, all are OK. I instruct Patrick in how to use the Walkman-type recorder I have brought, and ask him to always record three things: what time it is, where he is, and his question.

After two days, Dionicio and I stop by Patrick's home to listen to his tape so far. We meet the family and listen to the tape. To my surprise, only questions were recorded, no time, no place. The questions were always recorded three at a time. We have had a communication problem. I later sit down alone with Patrick and interview him regarding time and place, as well as some proper names.

Dionicio thinks most of the questions are "pretty good."

Michael Naimark currently works at the Multi-Media Lab at Apple Computer. This research was done while he worked for Atari Computers. —*Kevin Kelly*

Michael Naimark

(Following is a verbatim transcript from the first two days. The bracketed material is from my notes.)

Where are you staying in the Philippines?
When will be your flight back to your country?
Did you enjoy your stay here?
[Sat 11:00am home]

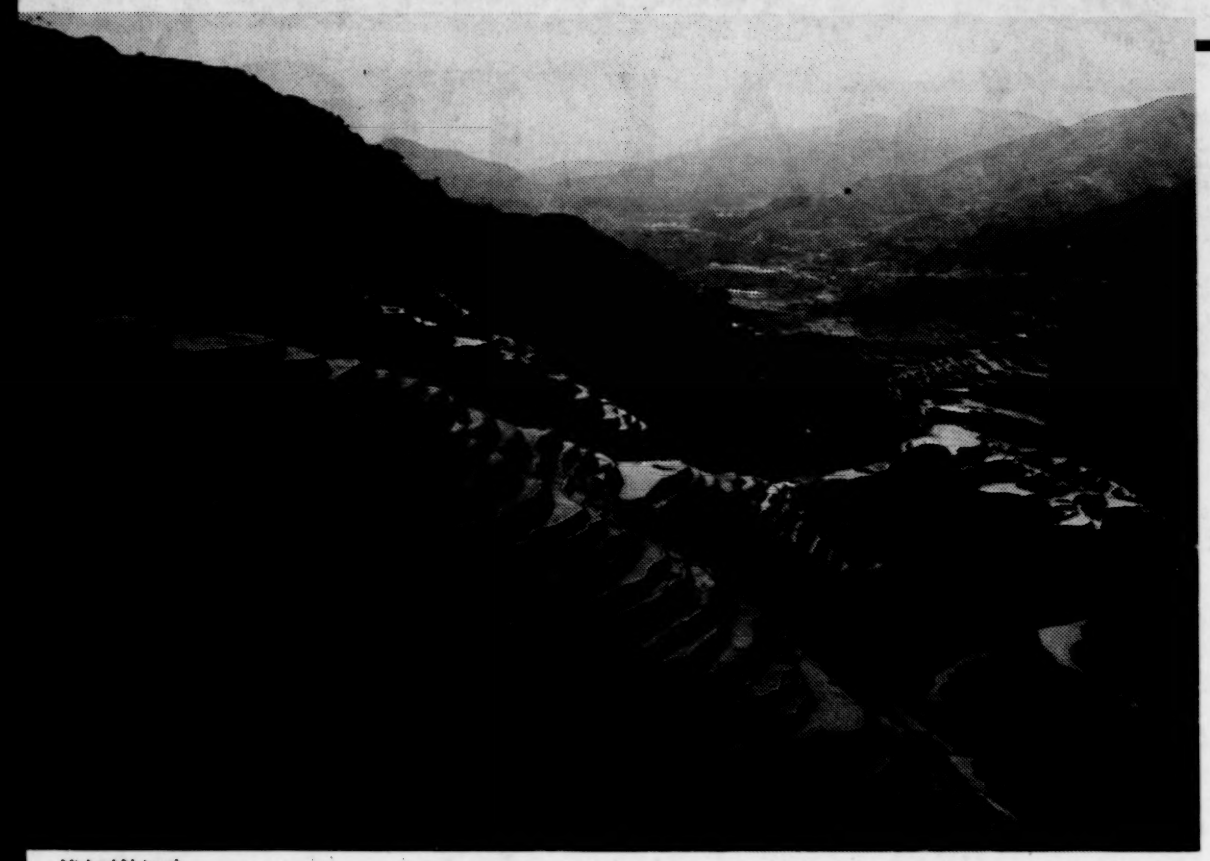
Where is the bus going?
When did the bus arrive here in Banaue?
Why did you* miss the bus?
*[*a particular tourist]*
Sat 2:30pm Halfway House Lodge]

Where did God appear to Moses?
What is the place that Moses did the Ten Plagues?
Who created you*?
**[God]*
[Sat 3:30pm walking home by the school]

Where do you find the biggest dam in the world?
When did you* visit the dam?
How did people build the dam?
*[*anybody]*
[Sun 6:00am near a neighboring house]

Where will you find the eighth wonder of the world?
When did the Ifugao build the rice terraces?
Why do tourists keep on coming here to Banaue?
[Sun 6:30am in his room]

Where is the place that the Malay build the rice terraces?
When did the Negritos come to the Philippines?
How did people come to the Philippines in the olden times?
[Sun 7:00am viewing rice terraces]



Michael Naimark

Where are you* going tomorrow?
What time you* leave Banaue tomorrow?
How can you* go to Manila without any bus?
*[*anybody]*
[Sun 7:10am walking down road]

Where is the place that Jesus was born?
What time did Jesus call his Apostle?
Who created the world?
[Sun 7:50am in Bocos village doing an errand]

Where do you find the highest mountain in the Philippines?
When did the people know that the highest mountain is in the Philippines?
Who is the president of the Philippines?
[Sun 7:53am Bocos village]

Where is that place that they begin the war before it came to the Philippines?
What is the year that Hitler declared war against the Allied power?
Who invented the atomic bomb?
[Sun 8:30am walking past school]

What country did you come from, Mike?
What time you arrive here in the Philippines?
What is your purpose in coming to Banaue?
[Sun 8:50am home]

Where do you find the country with four season?
When did the government know that America has four season?
How many season in the Philippines?
[Sun 9:00am home]

Where do people spend their holidays in Banaue?
When do they have holidays?
What do the people do during holidays?
[Sun 9:15am near home]

Where do people in Banaue get their food?
When do they plant rice here in Banaue?
What do the people do during harvest time?
[does not remember]

Where is the place that they make the spacecraft?
How many years before they build a spacecraft?
How did the scientists build the spacecraft?
[Sun 9:20am coming to market]

Where do you find the most valuable gold?
When did the people start to mine for gold?
Why they are mining for gold?
[Sun 9:25am in market]

Where is that place they have lots of oil?
When do people know that oil is inside the ground?
How do people make oil into gas?
[Sun 9:30am in Halfway House Lodge]

Where is the country that there are many jungles?
When did they discover that Africa has many jungles?
Why did the foreigners guard the forest?
[Sun 9:30am in the Halfway House Restaurant]

Where is the most beautiful rice terrace here in Banaue?
What time do the sun rise in Batad*?
How can you go to Batad?
*[*Batad is 14km away from Banaue]*
[Sun 9:35am giving tour of rice field]

Where is the best restaurant here in Banaue?
What time do the restaurant open?
Why are the people in Banaue are making restaurant?
[Sun 9:40am in Stairway Lodge]

Where is the place that they broadcast time?
What time the announcer announce the time?
What is the use of the radio?
[Sun 9:42am in Stairway Lodge]

Where do you find the smallest bird?
What time do people saw this is smallest bird?
How do people know that this is the smallest bird?
[Sun 9:45am home]

Where do you find the biggest waterfall in the world?
What is the year that the person found the biggest waterfall?
How do you know that the waterfall is the biggest?
[Sun 9:50am guiding tour at waterfall]

Where is the original carver came from?
What year that people of Banaue begin to carve?
What is the use of the carvings?
[Sun 10:20am guiding tour at waterfall]

Where are you* staying here in Banaue?
How many days you* are staying here?
Why are you here in Banaue?
*[*a particular tourist]*
[Sun 10:30am on road]

Where is the most beautiful hotel?
What time do you* sleep at night?
What did you* do before you traveled from one place to another?
*[*another particular tourist]*
[Sun 11:00am in Halfway House Lodge]

Where are you* staying in California?
How many years are you* before you leave your parents?
What is your problem now?
*[*Mike]*
[Sun 11:10am outside Halfway House]

Where do we find the biggest ocean?
What is the date the navigators found the biggest ocean?
Why do people know that the Pacific Ocean is the biggest?
[Sun 11:20am home]

What is the country that they don't make weapons for war because they are punished by the Americans?
What is the time America punished them?
How did America punish them?
[Sun 11:25am home]

Where is that place who first discovered writing?
When is that year that they discovered writing?
What is the use of writing?
[Sun 11:30am outside] ■

BALTIC

BY PETER RIGGS

ESTONIA

THE SINGING REVOLUTION

"AND NOW — STRAIGHT FROM their guest appearance in Mongolia — please welcome to the Estradni Theatre the Estonian show band *Apelsin!!*"

The middle-aged Moscow audience applauds warmly as the members of Apelsin, grinning and flashing V-signs, bound onto the stage. Each member wears the trappings of a different musical genre — one cowboy, one glitter, one cool. Trombonist and founding member Ants Nuut, clad in a tuxedo, strides up to the microphone: "Thank you very much for your enthusiastic greeting! Yes, we are glad, very glad to be back here in the capital city!" Titters, more applause. On stage, Nuut speaks heavily accented, cheerfully clumsy Russian — which the Muscovites find most endearing. "Yes, Apelsin has had a chance to play in many foreign cities — Ulan Bator, Hanoi, Tbilisi — and now we are back here in *beautiful* Moscow." And then — an infinitesimal pause, whose irony is lost on all except the Estonians in the crowd: "Ah, Moscow! Hooo-rah!!!"

☆

Hoorah indeed. As it dominates most other aspects of life here, we can be forgiven for assuming that Moscow is also the center of pop music in the Soviet Union. Actually, most of the best, pathbreaking Russian bands — Kino, Aquarius, Popular Mechanics, DDT — come out of Leningrad and points north, while two other very popular groups (Black Coffee and Nautilis Pompilis) trace their origins to towns in Siberia. But these are *Russian* bands, and not all Soviet bands are Russian. Moscow naturally promotes the view that Russians are in the vanguard of all artistic movements within the USSR; Kremlin bureaucrats must have been delighted when the BBC entitled a recent documentary about rock in the Soviet Union "The Russians Are Coming — With Music."

The traditional flag of independent, pre-Soviet Estonia, raised again officially as the national flag of the Estonia republic on February 26, 1989.

This title ignores the fact that it is not just the Russians who are making interesting, socially relevant music in the Soviet Union. Each different nationality is making a *unique* contribution to the process of restructuring; each nationality has its own creative genius and distinctly flavored approach to *perestroika*. And in the realm of culture, each separate "minority republic" has its own thriving music scene, worlds away from, and rarely oriented towards, Moscow.

This fascinating fusion of music and politics — a fusion which has only recently been "allowed" to take place — is nowhere more apparent than in the feisty Soviet Republic of Estonia, which has again asserted its independent spirit by declaring itself "sovereign," able to veto Moscow-drafted laws detrimental to the Estonian republic. Although Estonians make up less than one-half of one percent of the whole Soviet population, they have repeatedly been at the fore of new political and artistic movements. The republic-wide "Estonian People's Front" has become the model for similar movements asserting the cultural, linguistic, and political rights of the inhabitants of so-called "minority republics."

Estonians now are in the midst of a "Singing Revolution," which is both a cultural reawakening, hitched to the promise of democratic political expression, and a mass movement destined to change the course of Soviet history. For when Estonians lift their voices in song, it is not in hymns of praise to *perestroika*; nor, however, as critics of the "Singing Revolution" would have us believe, is it just the hoarse shouts of an ugly nationalism. What we're hearing from this tiny republic on the shores of the Baltic Sea is quite literally the sound of people singing for their lives.

☆

Strange antecedents have precipitated world-shaking events. Estonia's "Singing Revolution" similarly arose from an incongruous source — phosphates.

In the early 1980s, Soviet geologists confirmed the existence of Europe's largest and richest phosphate deposits in the Virumaa region of Estonia, and Moscow busily set about drawing up

ROCKS

plans to exploit this valuable resource. With the majority of Estonia's rivers and lakes already heavily polluted from agricultural pesticides and industrial discharges, with fishing among this seafaring people practically liquidated as a viable livelihood, and with immigration by Russians threatening to make Estonians a minority in their own homeland, Moscow nevertheless announced plans to dig up more than 25 percent of the land area of the entire Estonian republic to get at the phosphates, further resettling another 20,000 Russian laborers to assist in the process.

This wasn't the first such insult inflicted upon the Estonians by their Russian overlords. Forcibly incorporated into the Soviet Union in 1940 as a result of the secret Molotov-Ribbentrop pact, the land area of Estonia was hacked away at, with portions of this formerly independent nation administratively "transferred" to the Russian republic. An entire generation of Estonian intellectuals faced a stark choice in 1945: to stay, which they knew meant almost-certain imprisonment and hard labor in Siberia or to flee into exile. As it was, Estonia gave up even more of its territory in the postwar period; without significant concessions to Moscow, there was little chance that Estonia could survive. For more than forty years, Estonians had been hanging on, quietly resisting each new territorial or cultural encroachment. But the phosphate mining plan, whose benefits would flow to Moscow while leaving Estonia environmentally devastated, was seen as nothing less than the death knell of *Eesti*, the Estonian nation.

"The immigration factor was a big part of the phosphate question, and it's also the part that gets us in the most trouble," comments Peter Tooma, who writes a music column for a cultural weekly in Tallinn. "Because we've taken a stand against further immigration, almost all of which is *Russian* immigration, we get accused of bourgeois nationalism, of being anti-Soviet. Making an analogy of similar percentages, though, we ask Muscovites, 'How would *you* like it if eight million Chinese moved to *your* city?' " Estonians are already a minority in Tallinn; an accurate census has yet to be taken, but probably 70 percent of the capital city's population is Russian, a people with whom Estonians feel almost no cultural connection. Another writer remarks, "Most of the Russian immigrants don't feel *they* have a homeland. That's one of the real ironies of the Soviet system: the non-Russian peoples' sense of place gets labeled 'bourgeois nationalism,' though really it is something quite different, while Moscow promotes the idea of a 'Soviet motherland' synonymous with complete Russian dominance."

The Estonian sense of place runs deeper than an attachment to fertile land. Estonians are inheritors of a culture in which history and literature are thoroughly entwined through a tradition of narrative verse; their language brims with mythological references, and even the most obscure village in the Estonian countryside can trace its placename to some legendary event or epic battle. Among the most powerful images in Estonian folklore, one which occurs over and over, is the idea of "nine historical lands" — those geographical areas which, predating even the idea of a nation-state, nonetheless were seen as uniquely, inalienably a part of that larger land called *Eesti*.

This story of the role of rock in the revival of the Baltic republics in the Soviet Union was assembled by Petter Riggs, 28, who speaks Russian, Japanese, and several other languages. A 1988 Watson Fellowship sent him to Russia, Eastern Europe, and China to study the regions' rock'n'roll subculture. He would like to thank Toomas Ilves, Juri Estam, and Vesta for their help. —*Kevin Kelly*

And so when Moscow announced plans to convert one of these nine historical lands — Virumaa — into a huge, Russian-owned phosphate mine, and to dig up a couple of other areas for good measure, the rallying cry of the Estonian opposition became *Ei Ole Uksi Ukski Maa* — "No Land Stands Alone."

☆

Because Tallinn, Estonia's capital city, is relatively small compared with Moscow and Leningrad, it promotes a sharp interawareness among artists and intellectuals. The intelligentsia, through a very informal network of friendships and kinships, remains continuously in touch with what people in different fields of endeavor are doing. Estonia has thus been largely free of the unevenness of the Russian arts, where progress in one field is not necessarily paralleled by new developments in another. Because they all know one another personally, progressive political leaders in Tallinn actively seek the advice and leadership of artists and musicians in formulating appropriate *cultural* responses to current political dilemmas. And it was this spirit that produced the song *Ei Ole* — an effort by Estonian musicians to alert their fellow countrymen to the havoc which would be wrought by Moscow's phosphate-mining plan.

Ei Ole was recorded in "We Are The World" fashion by Estonia's top rock and pop performers, and backed up by the band In Spe. The lyrics of *Ei Ole* affirm that Estonians proudly remember their heritage, will always protect their homeland, and will in no way abandon the beautiful Virumaa region to the desecrations of strip mining.

Ei Ole was given its first public performance at the 1987 Tartu Music Festival, a gathering held in Estonia's second-largest city. "Even as late as

Toomas Volmer

The conclusion of the Tenth Annual Tartu Days Rock Festival, May 1988, at which Alo Mattiisen's "Five Patriotic Songs" were given their first public performance.

Spring 1988, when *glasnost* had supposedly already taken hold, there was still some question as to whether the song could be performed," comments one participant. "Up until the last minute, we didn't know if it would be allowed, or what kind of response it would get." The Tartu festival is an extremely important annual event, considered throughout the Soviet Union as testing ground for the permissible. Emotions were running high at the 1987 gathering; all wondered how long the policies of *glasnost* could last (of course, people are pondering the same question today). By the time In Spe and an all-star cast of Estonian singers came on stage, the crowd was already aware that something unusual was afoot.

The performance of *Ei Ole* set off tremors felt around the nation, and the inevitable backlash was not long in coming. *Ei Ole* was summarily edited out of a television program about the Tartu Festival and replaced with another song; a stern note from Central Broadcasting informed workers at Eesti Radio that under no circumstances was *Ei Ole* to be played over the air.

Ah yes, but that was 1987; what a difference a year or two makes. In the meantime, Moscow authorities have had another opportunity to learn a lesson that they have repeatedly *failed* to learn, in their futile attempts to suppress various forms of popular music: you just can't keep a good song down.

Where was *Ei Ole* first broadcast? From Finland's Radio One, whose Helsinki transmissions reach Estonian shores loud and clear.

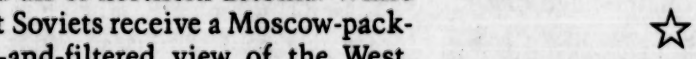
"People ask why all of the new independent political movements in the Baltics, the People's Front, the Singing Revolution, why it all started in Estonia, as opposed to either Latvia or Lithuania," says Mati Brauer, a producer at Eesti Radio. "I think there are two main reasons. The first, of course, is that the phosphate mining threat served as a huge catalyst; for us it was do or die. Neither of the other two Baltic republics were faced with such an immediate threat. The second reason — and this shouldn't be underestimated — is that for years we've been able to watch and enjoy Finnish TV."

The linguistic similarity of Estonian and Finnish, and the fact that Helsinki and Tallinn are just eighty kilometers apart, have made Estonians far and away the most well-informed citizens of the Soviet Union. Until December 1988, the Estonian language service of Radio Free Europe was heavily jammed — the dull red towers in the center of Tallinn, which once sent out a smothering screen of interference, still stand as brooding testaments to Soviet suspicion of outside

information sources. But television signals are almost impossible to selectively obliterate, and have thus blanketed all of northern Estonia. While most Soviets receive a Moscow-packaged-and-filtered view of the West, people living in northern Estonia regularly watch and understand direct broadcasts from a Western country — Finland. The Finns, to their great credit, have kept a close eye on developments in Estonia, and have aired news items, songs, and interviews that they knew would not be aired in the Soviet Union. One artist comments: "In the past, we'd tune into the news from Helsinki, then flip channels and check out the news coming from Moscow — and it seemed that we were on different planets, depending on whose news you were watching. Well, two things can happen in that sort of situation. You can throw up your hands, go crazy, put a gun to your head — or you can start thinking for yourself. We'd like to think Estonians chose the latter."

Because of the presence of other media, Party officials have been unable to enforce "look-toward-Moscow" cultural policies. Bans on "bourgeois influences," which can be implemented with some short-term success in the other "minority republics," are totally ineffectual in Estonia. The availability of Western films and music videos, and the relative affluence of Estonia, made Tallinn a center of black-market videotaping. Even now it is not unusual in such far-flung locales as Central Asia or the Caucasus to find videotapes titled in Finnish — obviously programs pirated from Helsinki broadcasts. Furthermore, because of the exposure to Estonian-, Finnish-, and Russian-language media systems and the requirement that one additional language be studied in school, the *average* Estonian understands four languages. It is hardly surprising, then, that Estonians are more internationally minded, and more aware of contemporary artistic trends, than all but the most privileged of Russian urban elites.

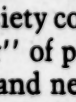
"Yeah, it's pretty strange," said one Tallinn musician wearily. "There's Finland across the bay — you can practically *see* Helsinki when it's clear. I can speak the language there, got tons of friends there — but I can't go there. If, on the other hand, I want to go to Vladivostok, ten thousand kilometers away, well, hey, that's no problem — Vladivostok is part of *Sovietski Soyuz!* But why the hell would I want to go to bloody Vladivostok? I want to go to *Helsinki.* I can think of *lots* of reasons to go to Helsinki."



Until the onset of *glasnost*, a sharp line separated official, politically neutralized *VIA* (Vocal-Instrument Ensembles) from underground, and therefore illegal, rock bands in Russia. This line was never quite so cut-and-dried in Estonia, as an organization called the Estonian Philharmonic Society gave assistance to a number of young bands. In fact, it's no exaggeration to say that in the early 1980s, the majority of bands picked by Moscow to represent "modern Soviet culture" abroad were Estonian. There were definite perks to being an "official" Soviet rock musician: you were allowed to make your living playing music, you had access to reasonable equipment, and — even though the beauty spots on the itinerary might be Ulan Bator and Hanoi — unlike the great mass of Soviet citizens, you could travel. The Philharmonic Society continues to maintain a "roster" of pop singers and bands both old and new, but the growing sophistication of the rock scene in Russia has ended the dominance of Estonian groups nationwide, while the business savvy of several Estonian promoters has made it unnecessary for new groups to rely on the good graces of the *Filharmonii.*

"There's something a little ironic in all this," comments one music writer. "Because Estonia has far and away the most sophisticated musical scene in the Soviet Union, Moscow shouted, 'Help, help, we need good bands to bolster our international image.' But what do they mean, good bands? For most people, I think it means that the members are talented musicians and that they write interesting songs. But not for Moscow — they mean 'good' in the sense of *compliant.* And so some of our groups that went for 'interviews' in the early 1980s cleaned up their act, worked up a set that would be acceptable to the censors, all the while promising themselves that once they were over this hurdle they'd again play the music they themselves wanted to play, music that *Tallinn* audiences would want to hear.

"But the opposite happened. It's hard for you to understand, because you don't live here, but the shadow — the fear — it eats away at people, and that ten percent of the show which was aimed at the censors became ninety percent of the music that the band was allowed to play in other parts of the Soviet Union. Finally, musicians became their own censors. They just stop writing songs that they knew wouldn't be allowed. Then came *glasnost;* suddenly it's OK to write openly, to write about rock and roll; and one of the first items about rock in a national paper is about how *effete* Estonian bands had become. Here we had all these great bands in Tallinn, but the official groups, the show bands that we sent 'abroad' to Moscow — groups like Apelsin that nobody here even *listens* to anymore — suddenly they were accused of being boring, of not addressing important social issues. Good God, what a world — we could only laugh." For the members of Apelsin, it must seem a very dark joke indeed; this band, whose first album sold 16 million copies nationwide (sales which garnered for each member of the band royalties of about $200) rarely plays in "the homeland," and seems sadly anachronistic in this age of Glasnost Rock.



But not all Estonian bands had the tenacity and good fortune to be accepted by the cultural establishment, or to outwit the bureaucratic mazes. Some groups were just too confrontational, too precocious. Such was the fate of Estonia's prototype punk band, Propeller. All Estonian musicians working today acknowledge that this group, destroyed by forces beyond its control, helped prepare the ground in which the seeds of the Singing Revolution could grow.

In early 1980, workers and on-air personalities at *Eesti TV* and *Eesti Radio* formed themselves into two teams in order to hold a celebrity soccer match. As a promotional gimmick, the locally popular band Propeller was asked to play both at halftime and after the game. At a time when rock'n'roll was effectively banned in most of the Soviet Union and barely tolerated in Tallinn, teenagers flocked to the game to hear Propeller; in all, between six and seven thousand people showed up for the match — more than any soccer game before or since in Estonia. After the volatile halftime show, nervous officials made the fateful decision to forbid Propeller from playing at the conclusion of the match.

This announcement triggered an explosion among Estonian youths. All hell broke loose in Tallinn, as teenage gangs roamed the streets, smashing

Toomas Volmer

store windows, overturning cars, and wrecking buses and trolleys. Most ominously for the russianized Tallinn bureaucracy, the picture that emerged from the rioting was not simply one of anger at the broken promises of the Soviet system, but more pointedly, of rage directed against *Russians*. In one incident, Russian militiamen from the Merchant Marine Institute in Tallinn hauled a number of Estonian teenagers off a bus and beat them to a ragged pulp; this triggered further violence, and after a day or two more militia units were called in to restore order. To Moscow officials, who had in the 1970s blithely proclaimed the existence of a new "Soviet people" with common aspirations and a common destiny, the Tallinn riots came as a rude shock, and set off alarm bells all across the Soviet Union. The "nationalities problem," successfully muted for so long, again leapt to the fore.

For its role as catalyst, Propeller was forcibly disbanded; the members were dispersed and slapped with a prohibition against performing.

Out of this series of incidents came the "Letter of Forty," a remarkable document written by some of Estonia's leading intellectuals and signed by forty prominent professors, scientists, artists, and composers. This letter — which interestingly enough now reads rather mildly — expressed "concern" over the destruction of the Estonian nation due to immigration of Russian nationals and repressive cultural policies. It was at the time a bold, almost desperate step, and as reprisals were inevitable many of the couples involved flipped a coin to decide if it would be husband or wife who would sign. In the months that followed, most of those who did sign were dismissed from their jobs.

At first, the Letter of Forty was available only in *samizdat*, the underground press. But early in the summer of 1988, as People's Front members gathered in Tallinn for a mass meeting and accompanying songfest, the Letter of Forty was published in the official Soviet press. In some ways, several articles accompanying the Letter were even more astonishing: they traced the fate of several signees from the letter's genesis to the present day. The sounds that filled Tallinn that summer weekend, eight years after a fateful celebrity soccer match had turned Estonia's capital upside down, must have sounded sweet indeed to the ex-members of Propeller.

We are standing at the top of the Tallinn Song Festival Grounds, an open-air amphitheatre on the edge of the city. A chilly northern wind swirls the last autumn leaves around our feet.

"After the Propeller incident we realized that physical confrontation wasn't going to get us anywhere," says Juri Makarov, an Estonian concert promoter and self-described "patriotic businessman." Juri wears his hair shoulder length, spilling over a denim jacket emblazoned with the words *Glasnost Rock*. "Fighting is really not our way, so people began to look for a new focus to our struggle. Since we want to be free to pursue our own, Estonian lifestyle, our actions and organizations need to reflect that." The movement found its sharpest reflection in song.

On the night of June 10, 1988, an extraordinary event took place at the Song Festival Grounds: a flag was raised. No, not the flag of the Soviet Republic of Estonia, but the blue, black and white flag of independent Estonia. All night long this flag, which just one year ago was totally banned, flew over a gathering of 80,000 Estonians who had come to listen to various Estonian bands and to participate in the singing of songs by the young composer Alo Mattiisen.

Now simply known as "The Five Patriotic Songs," Mattiisen's work provided a musical counterpoint to the raising of the flag of Free Estonia. From their first performance, these rock songs, rooted as they are in Estonian verse, folk songs, and choral traditions, seemed organically familiar to Estonians. All of them speak more or less directly to the question of Estonian identity, and abound in historical references which remind Estonians of their cultural heritage. One song conjoins a driving rock beat with a call-response melodic pattern widely used in Estonian choral music; another takes up the issue of Russian immigration into Estonia by utilizing images from Estonia's long tradition of narrative verse. And until daybreak, young and old alike sang the refrain from the most powerful of Mattiisen's songs: "I was born Estonian. I am now Estonian, and it is Estonian I shall remain."

Writing in the Estonian cultural weekly *Sirp ja Vasar*, Heinz Valk had this to say about the event:

> Participating in that celebration compensated for suffering decades of humiliation and denial of one's true nature. It was the most magnificent demonstration, the likes of which I've never seen in films, television, in my dreams or in real life. A singing and rhythmically moving mass of happy people, tens and tens of waving national flags, smiling faces, unanimity, no anger, no enmity, in their hearts but one word: Estonia. . . . People who make a revolution singing and smiling should be a noble model for everyone.

So this was June. Soon the national flags were everywhere, and so were Mattiisen's songs. Several times during the next few months the mass June gathering was repeated in other parts of Estonia, as Mattiisen, the band In Spe, and vocalist Ivo Linna from Rock Hotel loaded equipment onto a flatbed truck for a seat-of-the-pants tour of their native land.

"We thought at the time," recounts Ivo Linna, the vocalist featured on the recorded versions of Mattiisen's songs, "that we would be bringing this music to people who hadn't heard it yet, but the music preceded us. Nonetheless, we broke all kinds of attendance records, everywhere we went" Almost immediately after the songs were recorded, tape-dubbing cooperatives started working round the clock to produce cassettes with the Five Patriotic Songs, and passing from hand to hand these tapes reached all corners of Estonia. "It was a great experience for us," continued Linna, "because every concert was a sing-along."

Alo Mattiisen's Five Patriotic Songs were performed at a huge gathering at the Song Festival Grounds in late August. This event, "Rock Summer," brought together 24 bands from seven countries, including performances by Public Image Ltd., Big Country, and guitarist Steven Hackett. It was the largest festival in Europe of 1988, attended by an estimated 220,000 music fans. Thirty hours of music were broadcast on Eesti Radio; the entire event was managed and produced by Estonians, with technical help from Finland's Radio One and several Finnish sound and lighting firms. As Jaak Ojakaar from Eesti Radio relates, "The concert became a manifestation of Estonian-Finnish friendship, culminating in Alo Mattiisen's Five Patriotic Songs." By then, these songs were well known to all, and they were sung again at the People's Front meeting of September 11, a mass gathering attended by 300,000 people — that is, almost one-third of the Estonian population.

☆

As the fall wore on, the taped versions of Mattiisen's songs could be heard in bars, discos — in fact, anywhere that people gathered. The composer himself felt that the songs were "badly overplayed"; indeed, it felt a little strange to be listening to anthem-like calls for defense of the Estonian nation while sitting with a cup of espresso and a wedge of cake in one of Tallinn's many coffee shops. Estonians have begun to ask a worrying question: if rock is the medium and *glasnost* is the message, can artists and composers be co-opted simply by allowing them to do what they want? If the widespread distribution of politically charged music defuses its intensity, how will artists view their work when such composition no longer takes an act of courage?

"This summer was like first love," admits Ivo Linna, and while first love has an intensity all its own, rarely does it sustain. Force of repetition changed the impact of the Five Patriotic Songs, and since the dizzying pace of change occurring throughout the Soviet Union is exponentially multiplied in Estonia, actions which were unthinkable in April 1988 were passe by November. Estonia's declaration of "sovereignty," which caught Moscow and most of the West unaware, surprised no one in Estonia. But the rapidity of change has its costs.

"Naturally, the first time you are allowed to say such things, you want to say them as loudly as possible," comments Mati Brauer. "Artists, poets, and musicians are for the first time allowed to deal with recent historical themes, and, at present, our artists are making more politics than art. This situation, of course, is just as unnatural as the former requirement that artistic works be empty of politics. Right now we *need* the hard-hitting political dramas in our theatres, we *need* the wildly extravagant paintings of our young artists, just as we really need the music of Alo Mattiisen. But in a way it's just its own skilful propaganda. The message is coming through now, loud and clear, but we need to keep a critical perspective on this sort of work."

Not all groups have shown a political bent. As popular singer Anne Veski points out, "We can't all be writing 'Hurrah Estonia' songs — that will also get boring very quickly. Everywhere I go in the Soviet Union, peo-

Toomas Volmer

Alo Mattiisen, leader of the band In Spe and composer of "Five Patriotic Songs."

EESTLANE OLEN [BORN ESTONIAN]

(A. Mattiisen, J. Leesment.)

No less than a thousand beginnings.
Not brief shining moments[1], but a thousand years rising.
To deny your own nation
Is worse than selling yourself
into slavery.

Refrain:
I was born Estonian, I am now Estonian,
And it is Estonian I shall remain.
Being Estonian, proud and good
Free as my grandfather was[2]
Yes, truly free, as my grandfather was.

The voice of a thousand thunderclaps queries.
The open sea. Ancestral homesteads.
Sacred Soil.
A thousand times, and a thousand have remained —
Despite all troubles, they keep the holy fire alive.

(Repeat refrain)

1. Literally, "Not a swan's first flight," — signifying that Estonians have faced such tribulations before and are well-used to the struggle.

2. The reference to "grandfather" is quite deliberate — referring to the generation of the 1920s who fought successfully against Russian occupying forces to establish an independent Estonian state.

DEAR *WER,* 8/29/89

. . . I assume that by now you have received the FAX of Mattiisen's songs. There was indeed a holdup at this end, and the reason is rather interesting. Despite Estonia's bold course, everything is still at the whim of a few individuals . . . when we took the lyrics to one of about ten Fax machines in all of Estonia, the operator said "Sure, I'll transmit it, no problem," Turns out, however, that she is Russian, and having read through the texts and deciding that their content was nationalistic, she tore them up! I was furious . . . fortunately we had copies. The next place we went to, a Finnish/Estonian joint venture, was at first reluctant to transmit; they pointed out that FAX machines and all ingoing/outgoing correspondence must be registered with the KGB, and they didn't want to be seen as sending out info "contrary to their status" in Tallinn . . . well, after some minutes and a 50-ruble payment they relented.

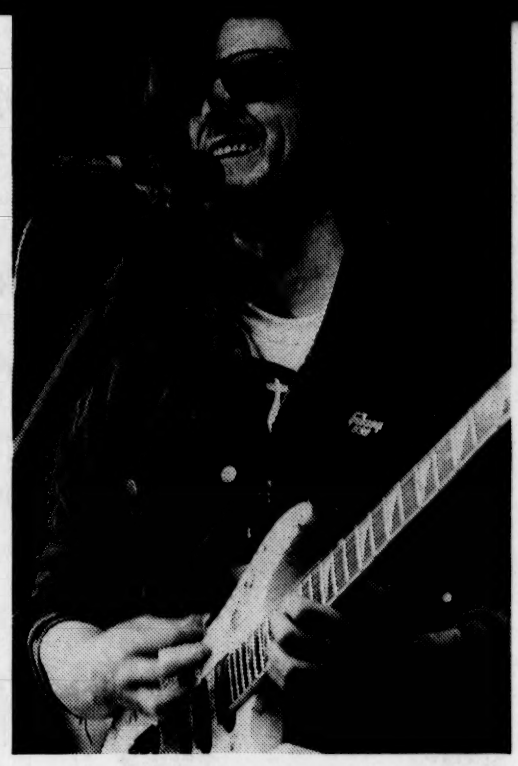
I most certainly hope you received that FAX the day after we spoke. A little taste of Soviet reality for ye. . . .

Peter Riggs

ple ask me, "What's happening in Estonia? How come you are all so *nationalistic*?' I try to explain that in general we are strong supporters of *perestroika*, that we have a spirit as a people which can be called nationalism, but really it's just that we want to sing in Estonian, to sing our own songs. We're not alone in that. Others are thinking about it — but they are afraid. We Estonians are a bit bolder. Now I'll explain to them — you do it, too. If all fifteen republics were to do so . . . you see, I'm also doing politics from the stage just by talking about what's happening here. And the people believe me more than they believe some politician."

Ultimately, the large role played by Estonia's musicians and artists in the republic's political life results from the movement's positivism: cultural figures are taken seriously precisely because they help define what Estonia *is*, rather than simply what it doesn't want to become. The People's Front is not anti-Russian, as many of its critics make it out to be; all their literature is translated from Estonian into Russian so that the many Russians living inside the Estonian Republic can understand what's going on. "Our complaint," commented one writer, "is that for so long the Soviet system has denied Russians the opportunity to have a homeland. We'd like to remind them of where that homeland is." The declaration of sovereignty should allow Estonians to more fully formulate policies appropriate to the needs of their homeland, including disposition of the resources found therein. "Give us once and for all the freedom to act and we can show the whole world what a little nation is capable of," wrote Heinz Valk. Estonian lawmakers have tried to provide that opportunity, that freedom to act. The constitutionality of their controversial declaration is still in question; Soviet officials hurriedly summoned some of the Estonian lawmakers to the capital so that they could "explain themselves." In the present unstable situation, it's not clear what political course the republic will take — or be allowed to pursue.

But in the meantime, the Singing Revolution will go on, seeking new and appropriate forms of expression. The people of this gritty and determined republic will continue to lift their voices in song, and to act upon these words: "I was born Estonian, I am now Estonian, and it is Estonian I shall remain."


Toomas Volmer

Riho Sibul, lead vocalist/guitarist for Estonia's top band Ultima Thule.

Ode To A Big Brother

(Original language Estonian. By Ultima Thule; lyrics by Riho Sibul.)

I bow down deeply to
My big and powerful brother
I'd go to pieces
Just so that I could show you
As Vaino[1] did, as Kogan[2] can
I'll take all troubles away

And from deep in my heart I am grateful
Oh, and songs of gratitude will flow from me

Dear half-brother, you are so big
So big that I can't even see you
This song takes my very last breath
A last breath that I'll give to you
It's true, I swear it,
In the name of our Lord it's true

And from deep in my heart I am grateful
Oh, and songs of gratitude will flow from me

Big brother, show yourself to me
So that I may thank you
You're a big man, so why do you feel
As though, really, you were small?
It's the little ones who get overshadowed

Still, I take from my sack
What little I have
You're the big one
You need to be fed
My only wish is to know in what way
Could I bring down the full wrath of God on your head

1. Former Party First Secretary in Estonia, who curried favor with Moscow and gave speeches only in Russian.

2. One of the leaders of Edinstvo, *a primarily Russian organization in the Baltic states which opposes the sovereignty/ separatist policies of the National Front.*

LATVIA

THE PEOPLE OF THIS SADDLE-shaped Soviet republic find the spiritual center of their nation in a rather unusual place, metaphorically speaking. By tradition the strength of the Latvian nation is in its ears, in the people's ability to listen to one another. The only way to render us powerless as a people, say the Latvians, is to cut off our ears, so that we may no longer hear what is happening to us.

It was with this idea in mind that the young Latvian composer Zigmaras Liepins set about dramatizing one of the most powerful and enduring myths of the Baltic region, the ancient legend of *Lačplesis* — a hero whose strength is in his ears.

Latvia, located between Lithuania and Estonia on the Baltic Sea coast, faces social and ecological problems similar to those confronting its two neighbors. But problems in Latvia are aggravated by a catastrophic demographic situation: Latvians are now a minority in their own homeland, and the capital, Riga — once considered the "Paris of Eastern Europe," because of its thriving arts scene and fantastic, experimental architecture — now feels like a city under cultural siege.

Moscow has encouraged Russian immigration to the Latvian republic with promises of apartments for the new arrivees — a powerful carrot in this housing-short country. Meanwhile, Latvian families may wait fifteen years for a flat of their own; this subtle process of dispossession is cynically referred to as "Latvian hospitality." Riga itself is now less than thirty percent Latvian; it is almost a novelty to hear Latvian spoken on the streets or in the shops nowadays. The Latvians, it seems, are in serious danger of losing their ability to hear one another, to hear what is happening to them.

Zigmaras Liepins is a little like the hero of his opera, who gathers his power through listening to the songs and sorrows of his people. He has listened carefully to what speakers from the Latvian independence movement have said from their political stage. He has thoroughly absorbed the music of his homeland, but also knows well other currents in world music. And his rock-opera *Lačplesis*

THE EARS OF THE NATION

was more than just a fabulous stage success; it was also an act of healing in Riga's community of musical youth, among factions that had almost ceased to listen to one another.

Until recently, the Latvian rock scene was a bit of an anomaly, divided into soft-rock and punk factions, with little middle ground. The punk groups were rabidly anti-Russian; the more mainstream groups for the most part eschewed political lyrics, concentrating instead on good ensemble playing and beautiful melodic lines.

What *Lačplesis* did was bring together performers from each of Latvia's top ensembles — Remix, Vektors, Opus, Livi, Jumprava — in one stage show, a production which encompasses a number of musical styles. "What was most amazing to me," relates Liepins, "is that every one of the performers I approached about *Lačplesis* agreed to participate. I didn't have to do any convincing." Also, *Lačplesis* was staged without any official Komsomol or youth theatre backing; the musicians did everything themselves in a remarkable coalescence of creative will around one gigantic project.

Juris Berzins

In the rock opera *Lačplesis,* Kangars, "traitor of the Latvian Nation," kills his best friend Lačplesis and ransoms the nation to foreign powers. Kangars is played by Imants Vanzovics, from the group Opus, and Lačplesis is played by Igo, from Latvia's best-known rock ensemble Remix.

☆

In some ways, the recovery of a national culture begins with the reappraisal of its symbols. This is especially true in Riga, where churches have had their crosses retopped with red stars, where the traditional coat of arms on the iron gates of the city have been replaced with hammer-and-sickle gratings. Latvians attempting to "de-Sovietize" the culture of their homeland look for renewed meaning in familiar myths and legends, in traditional festivals, and particularly in their native language. Indeed, many Latvians have taken great pains to expunge Russian loan words from their speech.

"The point is," says Liepins, "that we desperately need to hear one another — and that we must work together. Although I know many Russians have come to *Lačplesis* and have enjoyed the music, I doubt that Russians can really understand the point of the opera. In fact, I doubt Americans can, either. You are both from big nations, with frontiers, and a history of looking outward.

"But we Latvians don't have that. We look inward, towards our history and traditions. We have no other options. One thing that the peoples of small nations do have, however, is a particularly well-developed survival instinct. For us, we can do no other than hang on, at all costs."

Juris Berzins

(Left) In *Black Power* the bearers of a foreign ideology are led by Diterihs, played by Niks Matvejevs from the heavy-rock band Jumprava.

Gintaras Babravicius

LITHUANIA

OUTRAGEOUS ACTS OF MUSIC

The teenage fans of Algis Kauspedas, a member of the performance band Red Army, falling over the less-than-exuberant young guards in the front row.

"GREETINGS, HONORABLE LISteners. We're Lithuania's top band, Antis. People call us fascist and foolish, brave and bizarre. Count on us to fly in your ointment, soil your stuffed shirt, and slaughter any sacred Soviet cows still blocking *glasnost's* rutted road."

We're stretched out on the peaceful banks of the Svientoje River one summer evening, and the leader of the band Antis, Algis Kauspedas, is saying:

"In this spot was held the first — and probably the last — All-Lithuanian Architects' Rock Festival, featuring one and only band, Antis, formed just for the occasion. Architects had gathered in connection with some restoration work to be done at a nearby *kolhoz* [collective farm], and the musicians among us figured we were deep enough in the country to try out some things from the stage that you couldn't possibly get away with in town.

"So, we got some of our electrician friends to tap into the power grid, and together we all built a crude but functional stage, and Antis promised to play afternoon and evening performances. Which we did. After the second show the food and drink ran out, but it was still light. The crowd started saying, 'Hey, you guys, why don't you play again?' We thought: well, what the hell. So we climbed up on the stage and played those same songs for the third time that day."

A pause: Kauspedas peers into the thickening twilight, watching swallows skim the river's placid surface. He sighs, "Well, that was four years ago. We weren't arrested then, and haven't been yet. But no way did we ever suspect at that time what this prank band of architects would grow into."

What started as a joke and no more than a hobby for a cluster of clever Lithuanian architects took on a life of its own in the first tumult of *glasnost*. Despite their bizarre "cult band" approach — even today, Antis' music is filled with Zappaesque in-jokes and obscurities — instant popularity thrust Antis into a leading cultural role, one that demanded a little more consistency and organization, if not necessarily accessability. The band was forced by circumstances and rapidly escalating expectations to get serious about what they were doing. "You know, all of us are between 25 and 40, yet we came to be considered as one of the strongest voices of Lithuanian *youth*," comments Kauspedas. "And, as you've seen from the concerts, really our best fans are teenagers."

Yet it's only a half-truth to say that Antis has simply adapted well to changing circumstances. In many respects, they forced change by throwing down the gauntlet to cultural bureaucrats fumbling with the newfangled artistic policies of *perestroika*, and in doing so, Antis lent a lot of moral support to inchoate youth movements in Lithuania. "After a show, people would say to us, 'How can you say those things? Don't you think it's a little bit foolish of you?'

We'd reply, 'Well, we dunno, we just say them. You yourself got any problems with what we're saying?' 'No, but still, aren't you afraid?' To which we replied, because it was true, 'Sure, a little bit.' ''

The changes that Antis has faced and forced in its four years of existence have resulted in bolder texts and greater musical maturity. Soviet jazz and the dramatic arts are at their absolute highest level in Vilnius (Lithuania's capital city), but the rock scene has lagged badly behind. ''We lack sustainable contacts with other rock scenes,'' commented one member of Antis. ''In fact, we barely know what is happening in the other Baltic republics. Rock came here late, and when it arrived, it was mostly in the form of video. So it's not surprising that our approach is as much visual as musical.''

But lyrically, Antis is still anything but urbane. They have taken swipes at the satiety of Soviet bureaucrats (''Functioneri''), the woeful status of the intelligentsia (''Shush! You Intellectual'') — even the Soviet Union's fitness boom (''Sport''). But the whole is greater than its constituent musical parts: their stage appearances revolve around a particular theme which emerges only gradually during the concert.

''The hardest part,'' admits Kauspedas, ''is not the songwriting — it's coming up with a coherent show theme.'' And as the scope of the permissible widens, each new production gets more and more outrageous. Last year saw Antis setting up on stage stone-faced portraits of each band member, in official Politburo style. The players were listed on an ''honor roll,'' like that which can be found at the entrance to each and every factory in the Soviet Union, lauding ''Heroes of Socialist Labor.'' Their 1989 Spring /Summer show, however, was more than just pun and games — it struck deep at the heart of one of the most sacred icons of the Soviet state: the brave and daring cosmonauts.

In their ten-minute song ''Imperia,'' which links Moscow's imperial ambitions with its adulation of those who explore worlds beyond, Antis collides head-on with official Soviet myths about scientific progress and manifest destiny. Onstage, Kauspedas rides a space vehicle which collapses in-flight; gradually, a sharp allusion to Moscow's crumbling ''ship of state'' emerges. Among the large number of artistic productions in the Baltic Republics in recent months which examine the second decline and fall of the Russian Empire, Antis' ''Imperia'' is far and away the most caustic. Its sharpness has an added dimension for Lithuanians who have lived through the so-called ''period of stagnation''; as one listener remarked, ''Part of the reason this song is so damn funny is that just three years ago it would have bought each member of the group a one-way ticket to Siberia.''

Not everyone is laughing, however. Their separatist lyrics and strong criticism of the idea of Soviet culture have won them no friends in Russia. Gintautas Rakauskas relates, ''We traveled with the 'Imperia' show to West Germany and Italy this year in the company of two Russian bands. After the first performance, as we were getting on the tour bus to go back to the hotel, a lead singer from one of the other groups called out to us, 'Nice show, you fascists!' We just kept silent,

SHUSH, YOU INTELLECTUAL

(Original language Lithuanian. By Antis; lyrics by Algis Kauspedas.)

Shush, you intellectual, you unhappy pauper
What can, what can, what can, what can you be good for?
Shush, you intellectual, you're still in existence?
Eating merely rubbish, wearing rags and stitches

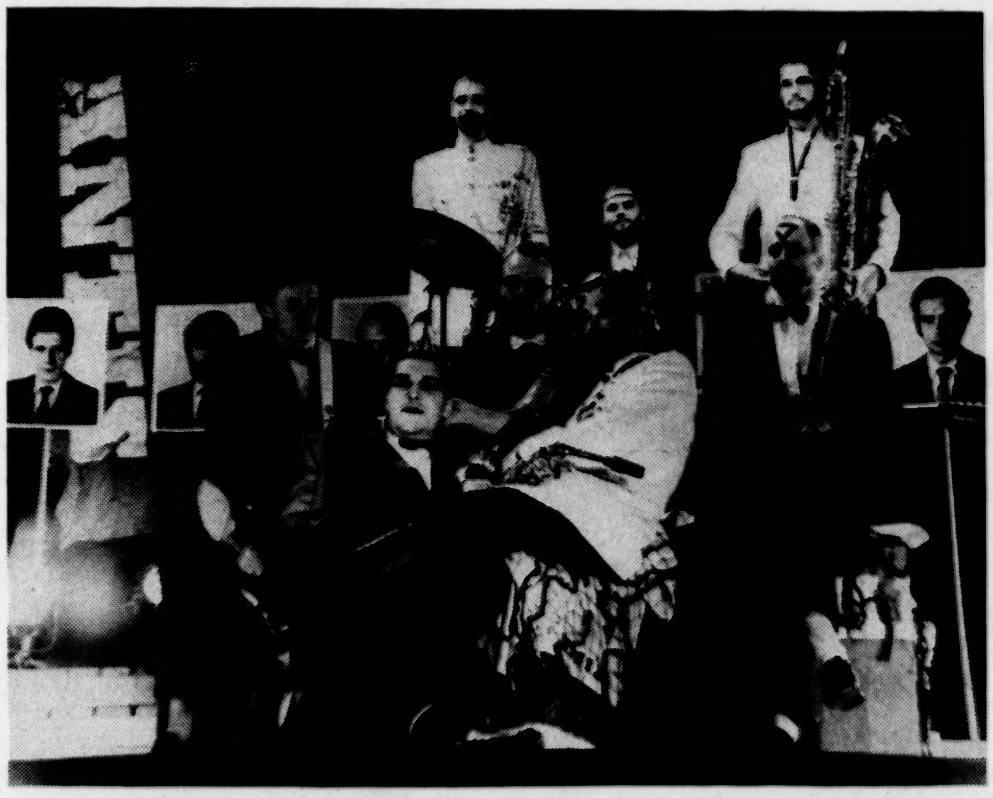
Shush, you intellectual, sleeves all patched and mended
Maybe I should lend you a bit of cash for spending
Shush, you intellectual, learned poor and needy
What is it you dream of, from our loving country

Professor drive me for a fee,
Listen, take my thirty kopeks
What kind of revolution can you be
If you have no need for intellectuals

Shush, you intellectual, you unhappy pauper
What can, what can, what can, what can you be good for?
Shush, you intellectual, funny, human layer
You strived to be so honest, and so very clever

Shush, you intellectual, little lamb so cultural
Go collect the harvest, defender of tomorrow
Shush, you intellectual, soon you will be finished
Use the press to make noise — we will let you do this

Shush, you intellectual, you unhappy pauper
What can, what can, what can, what can you be good for?
Shush, you intellectual, there's a pit below you
Who does not believe that great days will yet bestow you?



Gintaras Babravicius

The band Antis in its 1988 ''Politburo'' incarnation. Early influence of rock videos led to their strongly visual style.

but I think we were all a little shook up by her comment. I guess we thought that as musicians, we were all in this together, showing different aspects of rock music in the Soviet Union today; but by the end of the tour there was almost no exchange between us and the other groups. It was pretty unpleasant."

Antis' tour abroad stunned European audiences used to seeing Soviet and Russian rock as synonymous, but also marked a watershed for the identity of the band itself. Kauspedas: "It wasn't so much the tour and the hype — it was the first time we really had to ask ourselves, 'What do we represent? Are we just as reactionary as these Russian bands?' You see, we had producers coming up to us and saying, 'Hey, you guys are great, if only you sang in English I'm sure you'd be big stars.' We thought about making a record in English for about three seconds. It was a marvelous feeling, actually, being able to say, 'No, we're a Lithuanian band, and if we sang in any language other than our own, or turned to themes outside our own life-experiences, it'd be a disaster. So thanks but no thanks."

☆

Back by the river, a wild duck manages an ungainly takeoff and heads toward the forest on the opposite shore. "Our namesake," comments Kauspedas laconically. Ah, in Lithuanian, *antis* means duck? So you guys are called "Duck." But why a duck?

"You've seen our logo, right? The typeface is just the same as on the main Party newspaper in Lithuania, *Tiesa* (Truth). Now, when this paper prints an obvious falsehood, in slang Lithuanians say, 'Oh God, what a duck!' "

One last observation is provided by the program notes from Antis' most recent tour, and it too rings true.

"The Duck means quickly growing hope, the defense bastion of Lithuanian youth's interests." ■

CONTACTS:

ANTIS has one cassette available for purchase in North America. The recording is *ŠĂ! (Shush!)* and contains material recorded in 1987-88.

$10 postpaid from Thurlbeck productions ("Antis" cassette), INC, 529 West 42nd Street/Suite 3M, New York, NY 10036.

ESTONIAN BANDS The Estonian Rock Musicians' Club, *LEVIMUUSIK*, is in the process of setting up a joint venture with a Helsinki firm for the release of recordings of Estonian bands abroad, with groups such as Ultima Thule, Mahavok, and In Spe. Some compilation cassettes are already available. For more information, write:

Christian Moustgaard, "Starshell OY," Radio City, Porkkalankatu 1 00180, Helsinki, Finland.

TALLINN'S "LEVIMMUUSIKUTE KLUBI MUUSIK" has organized and sponsored the "Tartu Days" festival of the last ten years, plus the gigantic "Rock Summer" festival in Tallinn. (The 1988 gathering was the largest rock music gathering in all of Europe that year.)

Levimuusikute Klubi, Eesti Filharmonia, Tallinn, Estonia, USSR-20001.

LATVIAN COMPOSER Zigmars Liepins invites serious inquiries about *Lacplesis* and Latvian music:

Zigmars Liepins, 1-1 Zirny Street, Riga, Latvian SSR 226015.

Algis Kauspedas and the band Antis in full swing.

ANTIS

Gintaras Babravicius

Back in the USSR

The only book ever written on the Soviet rock scene, by the only guy in Russia who's a "professional rock critic." Artemy lives with his mom — he has to — but he is a cool dude, even if he has to publish in Komzomol 'zines. This book chronicles the evolution of the Russian counterculture during the cold-war years. Full of amazing detail — like Soviet rockers cutting bootleg flexidiscs onto used chest X-rays. This is what a true "underground" looks and feels like — weirdly reminiscent of the Harlem Renaissance, in many ways. A moving, very human, very street-level and very readable piece of fascinating social history. —*Bruce Sterling*

•

The demand for pop and jazz recordings at the end of the fifties and beginning of the sixties was already enormous, while records and tape recorders were in catastrophically short supply. This led to the birth of a legendary phenomenon — the memorable records on 'ribs.' I myself saw several archive specimens.

These were actual X-ray plates — chest cavities, spinal cords, broken bones — rounded at the edges with scissors, with a small hole in the centre and grooves that were barely visible on the surface. Such an extravagant choice of raw material for these 'flexidiscs' is easily explained: X-ray plates were the cheapest and most readily available source of necessary plastic. People bought them by the hundreds from hospitals and clinics for kopeks [pennies], after which grooves were cut with the help of special machines (made, they say, from old phonographs by skilled conspiratorial hands).

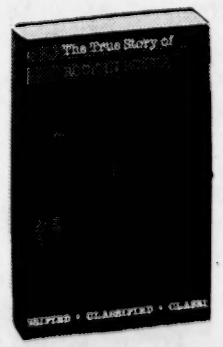
The 'ribs' were marketed, naturally, under the table. The quality was awful, but the price was low — a rouble [$2.00] or a rouble and a half. Often these records held surprises for the buyer. Let's say, a few seconds of American rock'n'roll, then a mocking voice in Russian asking: "So, thought you'd take a listen to the latest sounds, eh?", followed by a few choice epithets addressed to fans of stylish rhythms, then silence.

Front and back covers of the first Zoo cassette LP — a typical example of a Soviet underground tape.

•

Next, both the philharmonias and rock clubs are also switching to cost accounting and self-financing. This means the demise of the underground, since 'amateur' bands will now start signing record contracts and making money from their gigs. We've waited a long time for this, and it's a great day, but . . . previously, musicians exercised their creativity under the slogan 'We've Got Nothing To Lose', and thus didn't think much about alter ing their work to accommodate the censors or win official prestige. Now, whether they recognise it consciously or not, the new conditions push them toward compromise, and one can already see some effects. There are suddenly far more purely commercial rock bands, and noticeably fewer home-made cassettes.

This is just one of several paradoxes of *perestroika* . . .



Back in the USSR
Artemy Troitsky, 1987; 160 pp.
$9.95 ($12.20 postpaid) from A.I.D.C., 64 Depot Road, Colchester, VT 05446; 800/445-6638 (or Whole Earth Access).

Glasnost

This magazine, filled with English translations of articles appearing in the Moscow-based journal of the same name, gives a much clearer picture of the political transformations called "glasnost" and "perestroika" than is available from any other source. It shows that while the winds of change are indeed blowing strong, it's naive to think they are pushing the USSR closer to our way of life.

The articles range from broad sociological analyses to harrowing personal accounts of mistreatment and corruption; from upwellings of suppressed nationalism to witty satire; from brief glimpses of promising trends to lengthy accounts of officially misrepresented or ignored events. Be forewarned that some of the hottest issues in contemporary Soviet life are still of rather limited interest to foreigners: the first 30 pages of ***Glasnost****'s January issue were devoted to ethnic unrest in Armenia/Azerbaijan, for example.*

We cannot be confident that the processes of reform will succeed and be irreversible. So many beliefs, norms and patterns are being challenged, so many pent-up forces unleashed — and with hardly any improvement yet in the quality of life for most Soviet citizens. Whatever the outcome, this magazine gives us a front-row-center seat on a human drama of truly monumental proportions. —*Robert Horvitz*

Glasnost Information Bulletin
Larry Parr, English-language Editor
$48/year (6 issues) from: Center for Democracy in the USSR, 358 W. 30th Street, Suite 1-A, New York, NY 10001. (or Whole Earth Access).

Lithuanians are a religious people. Here, a former labor camp prisoner celebrates his release.

MAIL ART GLASNOST

Access to Postal Citizen Diplomacy in the Soviet Union

BY CHUCK WELCH

Something quite extraordinary arrived from Hirakata-City, Japan in my mailbox today. As I reached for the mail I felt a flat, cardboard-like hand with fingers spread open as if reaching for my own hand from its mailbox lair. Customarily, my mailbox is jammed with medical journals and monthly bills so I had to pull out this hand with considerable effort. There were no cries or groans in the labored delivery except my own reaction as the blue- and orange-sided, lifesized hand emerged in daylight, incorrectly addressed, yet delivered to me, The Cracker-Jack Kid.

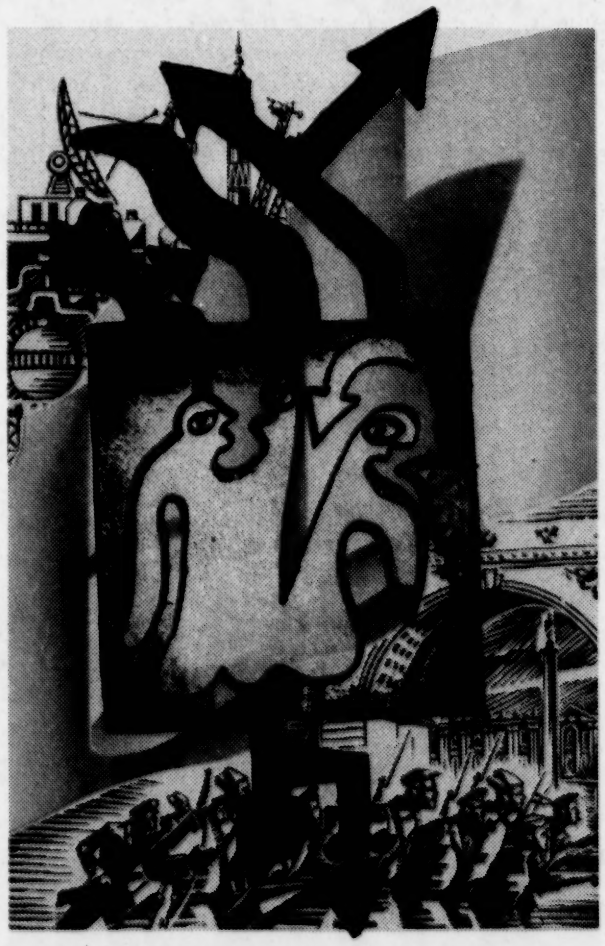
But wait! There was more to discover in this mailbox mystery. The slightly damaged hand was attached at the wrist to a slender, postage-stamp-covered *umbilical cord.* As I patiently pulled one foot, then two, three, four and five feet of cord from my mailbox, I heard someone laughing behind me as I looked over my shoulder at my smirking neighbor. Hoping to avoid any audience at the cluster mailbox, I desperately *yanked* out yet another five feet of cord wrapped in individually cancelled postage stamps. Finally, to my relief and my neighbors' utter astonishment (several people were gathered by now), another outstretched hand emerged revealing the sender's Japanese address. On the palm of this hand was scrawled a message from Seiko Miyazaki: "I hope for a peaceful world where people live together hand in hand."

It is a common communicative theme among mail artists, this expressive desire of peace so cunningly conceived by Seiko through the unknowing partnership of postal authorities. Certainly, through the years, there have been other curious mail art objects dropped at my doorstep. I've received laminated money, dirt from Canada, stamped stones from England, sand from Saudi Arabia, postcard poems, artist books and "zines," stampart and four-foot-long painted, plaster sharks. All of these mail art objects are as varied in construction, media and content as are the senders' nationalities and interests. But beyond all of the eccentric artifacts and giftgiving among artists is their belief in a global network community of two-way communicative exchange.

For nearly two decades several thousand mail and telecommunication artists have been actively engaged in an open form of global glasnost. While glasnost is the ideology of one government's internal policy, mail art and telecommunication networking are the common domain of individuals empowered by a will to circumvent bureaucracy, nationality and ideology. Fine Art critics often mistake the quality of mail art products and telecommunication art projects as evidence of marginal, unsophisticated artwork when in fact, it is the activity or process of two-way communication and transmission that is an art form in itself. The important message Seiko is relating to me, and my creative response to her message and image, are collaborative, communicative bonds far more important than any association with galleries, museums or critics ruling a competitive art-market culture.

In the broadest interpretation, mail art and glasnost are terms that signify individual rights to freedom of expression and open communication.

While my exchanges with Japanese mail artists have been extraordinary in their variety and capacity to flow through postal channels with liberal policies, I am painfully aware of



Mixed-media conceptual poems by Rea Nikonova. Many of her poems are self-described as "gestural" or "action-poems." Often, she'll rubberstamp her name instead of signing it on the artwork. The stamp reads REA-LISM in English and Russian, and can be playfully interpreted as "Rea's reality."

Crackerjack Mail Archive

Known as the Crackerjack Kid in mail-art circles, Chuck Welch can be reached with a 25-cent stamp at Renihan Meadow #85, Lebanon, NH 03766. —Kevin Kelly

МЭЙЛ АРТ

The cover of Serge Segay's "Mail Art" pamphlet, printed in 1989 for distribution within the Soviet Union. Since 1965, Segay and Rea Nikonova have authored a "samizdat" magazine entitled *Number*, which includes poetry, criticism and manifestoes.

CrackerJack Mail Archive

limited success contacting mail artists within the Soviet Union. Evidence of mail art glasnost within the Soviet Union is encouraging considering the fact that mail art exchanges between Soviet and American mail artists were practically nonexistent before 1986. If Chairman Gorbachev's glasnost policy has brought an enlightened climate of political change throughout Soviet society, why shouldn't glasnost be extended to Soviet postal policies governing deliveries abroad?

Most of my problems in contacting Russian mail artists are attributed to the postal systems of America and Russia, as they continue to fight the Cold War with inflammatory rhetoric that enforces oppressive regulations and condones censorship. While U.S. and Russian mail artists are stymied by warring postal bureaucracies, Chairman Gorbachev's policies of glasnost have set the stage for unprecedented U.S.-Soviet cultural art exchanges. Meanwhile, present mail art exchanges between U.S. and Soviet artists represent merely a trickle in a mailstream which should be overflowing.

How can mail artists within the U.S. and Soviet Union encourage mail art glasnost between two monolithic postal systems at war with each other? Firstly, they can try to expand the existing U.S.-Soviet mail art network by working with mail artists already living within the Soviet Union. Soviet mail artists' addresses will follow so that readers can initiate private action. Secondly, U.S. mail artists can improve their chances of getting mail past Soviet censors by carefully studying Russian regulations and restrictions, i.e. addressing and registering mail properly. Again, this article will help readers choose a "legal" mailing strategy which will insure some success of mail delivery to Soviet addresses. Thirdly, an understanding of mail art among Russians could be encouraged by promoting a mail art exchange among the peoples of both countries.

Some of these objectives could be achieved by a jointly sponsored bi-national mail art exchange and exhibition. U.S. and Soviet governmental mail art sponsorship could symbolize a renewed spirit of cooperation and good will between the postal bureaucracies of both nations. The outcome of such a major cultural exchange could help soften current hard-line postal policies.

But because the United States Government refuses to sponsor any kind of peace project proposals initiated by visual artists, there is only one governmental source of support remaining, the Soviet Government. Soviet approval of a Bi-National Mail Art Peace Exchange must come exclusively from the Soviet Peace Committee or the Union of Soviet Artists. We encourage readers and mail artists to support our call for a Bi-National or International mail art Friendship Exchange with the Soviet Union by writing to The Union of Soviet Artists, #10 Gogolevski Blvd., Moscow 12109, U.S.S.R. or to U.S.-U.S.S.R. Friendship Mail Art Exchange, P.O. Box 978, Hanover, NH 03755. Readers can acquire the Soviet Government Peace Committee address by writing to Soviet Peace Committee, Ul. #10, Kroptkinskaya Moscow, U.S.S.R.

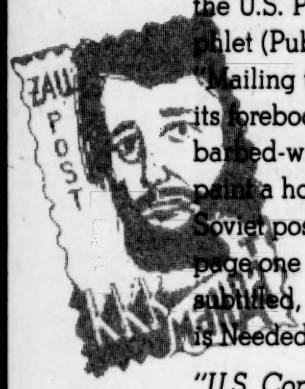
Courtesy John Held Jr., Modern Realism Archive, Dallas, TX

"Lithuanian Mail Art Show Announcement"; the exhibition deadline is listed as June, 1989 and requests any mail art dealing with the theme, "Windmills." Readers can contact the organizer for documentation by writing Nekrasius Jonas, SU 235220, Pakruojis, ul. Makarenkos 39-17, Lithuania.

Mail artists networking together ought to be able to generate interest and support for either a U.S.-Soviet or International Friendship Exchange. In June 1985, an enterprising mail artist named Wally Darnell received permission from the Chinese Government to host the First International Mail Art Show in the People's Republic of China.

However, let's just assume that all you want to do is singly get in touch with Soviet artists to exchange all manner of objects and creative concepts. If you're a U.S. citizen you've got some serious mailing restrictions to consider.

Soviet postal regulations have only slightly improved since Gorbachev encouraged *glasnost*. The U.S. and Russian postal bureaucracies remain highly suspicious of each other. To date, the United States Postal Service reports continued inconsistencies in the manner in which the Soviets enforce their prohibitions. ►



First-time mailers to the Soviet Union would be well advised to acquire the U.S. Postal Service's Black Pamphlet (Publication #269) titled, "Mailing to the Soviet Union." Like its foreboding black cover with barbed-wire turrets the contents paint a hostile, editorial view of the Soviet postal authorities. Consider page one of the pamphlet, which is subtitled, "Why This Publication is Needed":

"U.S. Congressional investigations have concluded that Soviet authorities systematically interfere with mail to certain addresses and groups for political reasons. In reading this publication, you will encounter examples of how the Soviet system differs radically from ours."

The Black Pamphlet encourages the American public to report Soviet mismanagement of U.S. mail by "sharing your experience with the Universal Postal Union." Furthermore, the document encourages citizens to read Benjamin Gilman's report entitled "A History of the Soviet Union's Deliberate Interference with the Flow of Mail," Committee Print No. 99-5, July 15, 1985.

Looking beyond the Black Pamphlet's anti-Soviet commentary, the reader will find useful, though depressing, mailing charts like the Prohibited Items list on page 17. Here, one can easily find anything that a U.S. citizen *CANNOT* send to the Soviet Union: Literature and *plastic* works of art of a religious nature, printed papers, blocks, negatives, exposed spools of film, photographs, tapes, video cassettes or video disks with film recordings and other video programs, manuscripts, records and other sound recordings, drawings and other printed or sculpted products containing information which may cause political or economic prejudice to the U.S.S.R., to public order, to health protection or to public morals, fashion catalogs, used underwear (yes, used underwear!), video cassettes, video tapes, video disks, whether recorded or not, musical greeting cards, canceled or uncanceled postage stamps and stamp collections, pasta products . . .

Some U.S. mail artists have bypassed restrictive U.S./Soviet postal regulations by sending forwarding directions with their items to friends in other countries with more relaxed postal regulations.

Another list titled "Restricted Articles" shows items which may be sent provided: 1. They are intended as gifts for the addressee's personal use. 2. They do not exceed maximum quantities that are listed. The Restricted Articles list borders the comical and absurd. For instance, only seven ounces of chewing gum can be sent by a U.S. citizen, six pairs of stockings or new socks, one pair of gloves, etc.

Exchanging mail art with Soviet artists is a hit-and-miss proposition. Some of the errors most commonly made by U.S. citizens when mailing to the Soviet Union include:

1) Failure to leave all printed matter *unsealed,* regardless of whether sent at printed matter rates or letter rates.

2) Personal correspondence *cannot* be sent in parcels.

3) Printed papers, books, magazines or newspapers can be delivered in a package but you can't exceed one copy of any item.

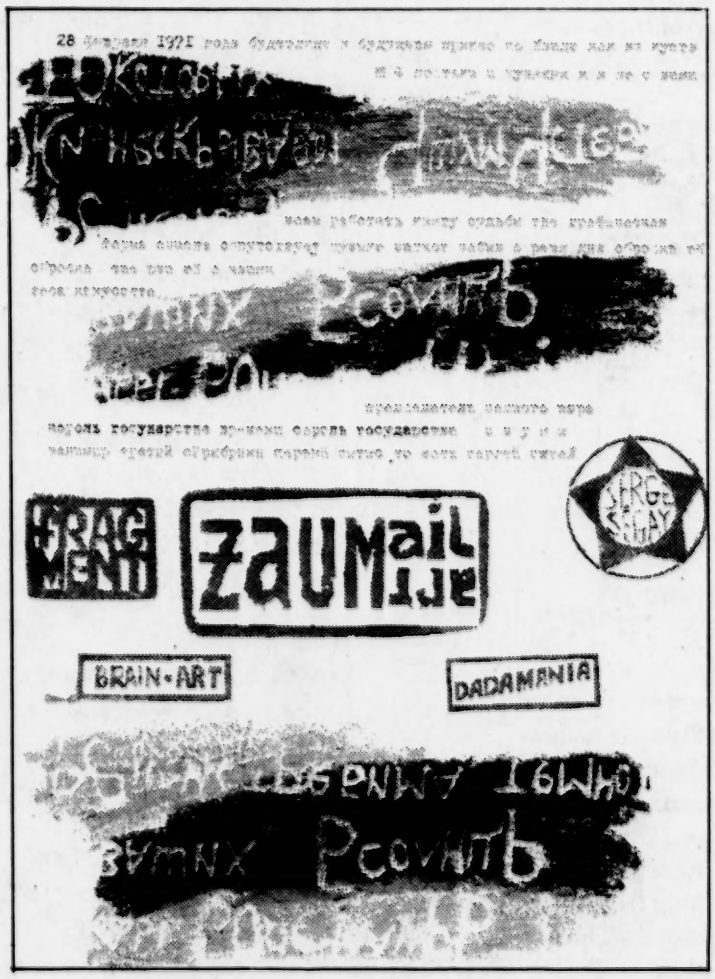
4) Don't make correction marks on the text of any printed papers.

5) Follow parcel size limits! The maximum length for all parcels is 42". The maximum parcel length and girth combined is 79".

6) The weight limit for Parcel Post cannot exceed 22 lbs. Letters, letter-packages, publisher's periodicals and regular printed matter cannot exceed 4 lbs.

Mailing to the Soviet Union is incredibly slow. Be patient! Don't be discouraged if immediate replies from Soviet artists are not forthcoming. According to the January 1989 issue of *Soviet Life Magazine* Russian citizens are also asking why it takes so long for international mail to reach their homes. It appears that the editors of several popular Soviet publications, including *Literaturnaya Gazeta and Izvestia,* have walked into the offices of the U.S.S.R. Ministry of Communications for explanations and were told by the deputy head of Moscow's International Post Office, "True, we are often reproached for delays in processing letters. But most of the complaints are unfair." The deputy head then suggested to the *Izvestia* cor-

Crackerjack Mail Archive



Serge Segay describes much of his work as visual poetry which is composed upon printed texts, photographs and sometimes slides. Literal and/or symbolic visual messages are often "hidden" in the conceptual work. Rubber-stamp art is often used in his mail art.

respondent that they open a couple of mailbags that had just arrived. Sure enough, there were letters postmarked three and four months earlier from New York City. According to *Soviet Life Magazine,* "The bags from Spain and Austria had many letters stamped five to seven days earlier and also letters sent 30-45 days ago. . . . In each of the three mailbags there were unglued or hardly glued envelopes and envelopes glued with Scotch tape."

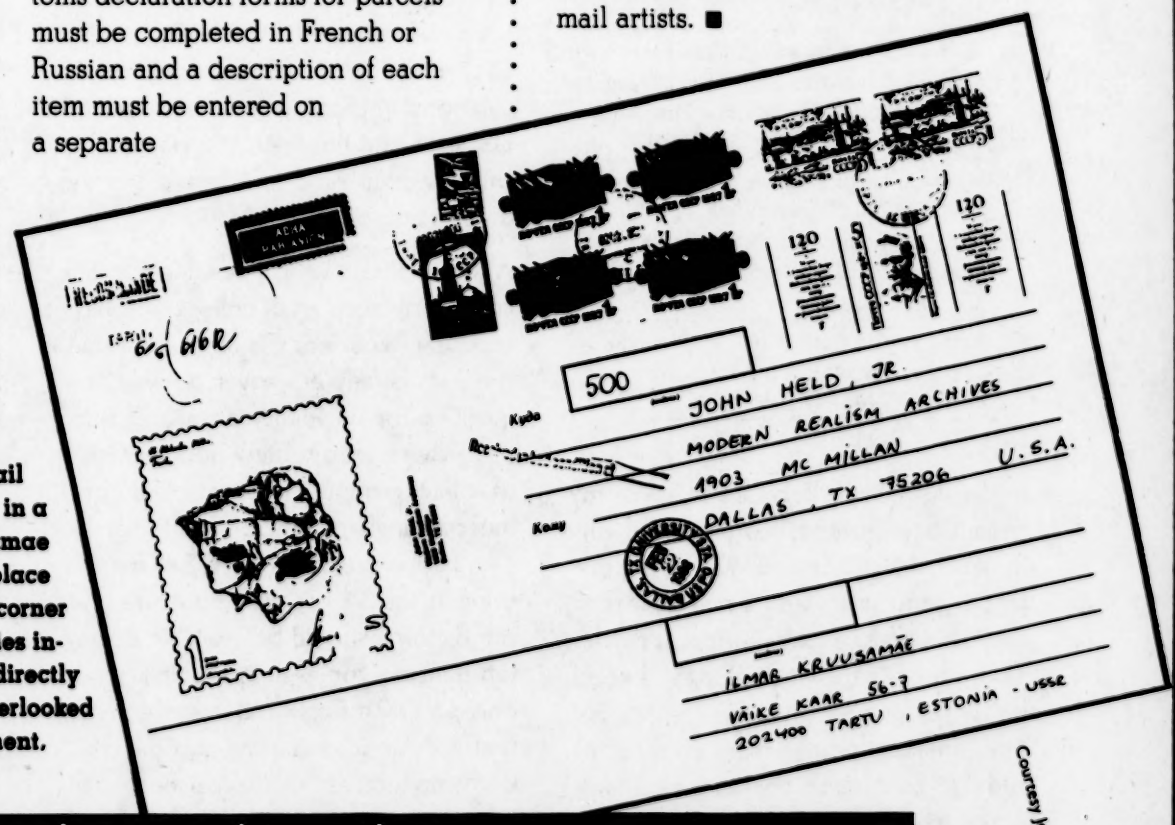
The deputy head of Moscow's International Postal Office did not offer an explanation for all of the unglued and scotchtaped envelopes but it seems apparent that postal inspectors are obsessively thorough! According to *Soviet Life Magazine,* Moscow's International Post Office gave the following explanation for the delayed mail: "One of the problems is the different rule of address writing in the Soviet postal practice. The rule is that the sender's address should be written in the lower right-hand corner of the envelope." Another explanation for the delay of mail was blamed on other countries which wait to send mailbags to Russia until they're filled.

Of all the many explanations offered by Moscow's International Postal Office, perhaps the most justifiable argument is in the way foreign mail is addressed. The Black Pamphlet fails to explain the proper way to address mail destined for Soviet citizens. When I asked postal clerks at main-branch post offices in Minneapolis and Boston how to address mail to the Soviet Union, they couldn't assist me. It is apparent that the United States Postal Service could be doing a far better job assisting the American public with basic Soviet mailing procedures.

When mailing to the Soviet Union, always be sure to specify that your mail art is a gift. Registering and insuring mail to the Soviet Union doesn't guarantee that your letters and parcels will have a better chance of being delivered. In fact, there is reason to believe that registering your mail will only delay its delivery.

As of May 1, 1987, Soviet customs authorities announced that all customs declaration forms for parcels must be completed in French or Russian and a description of each item must be entered on a separate line. According to the Black Pamphlet general descriptions on customs declaration forms, such as "clothing," "footwear," "cosmetics," etc., are not acceptable. Parcels accompanied by incorrectly completed customs declarations will not be accepted for customs clearance.

If any of the Russian postal regulations seem vague or ambiguous, it's because THEY ARE! The U.S.P.S. recommends that you be conservative in all of your interpretations of Russian postal restrictions and regulations. If you are inclined to mail art into the Soviet Union, begin with a simple postcard or letter and avoid political content. Again, don't be discouraged if your first, second, third or even fourth attempt remains unanswered. Eventually, you will succeed! Networking for mail art glasnost is something every individual artist can do. With continued efforts you should be able to contact at least one of the following Soviet mail artists. ■



The standard format required to address mail destined for the Soviet Union is shown here in a letter from Russian mail artist Ilmar Kruusamae to John Held Jr. Customarily, U.S. citizens place their return address in the upper-left-hand corner of an envelope, but Russian postal authorities insist that Americans place the return address directly below the addressee, a major requirement overlooked in the U.S. Postal Service's consumer document, "Mailing to the Soviet Union."

Soviet mail artists:

Eugenij Arbenev
Malysheva 24, 65P-352
Sverdlovski 620 279, U.S.S.R.

Ilmar Kruusamae
Vaike Kaar 56-7, 202400
Tartu, Estonia, U.S.S.R.

Ivan Czuikov
14-4-586 Ul., Festivalnaia
Moscow 125 414, U.S.S.R.

Ervin Ounaiuu
Anna Haava 2-4, 202400
Tartu 4, Estonia, U.S.S.R.

Boris Konstrictor,
Isaakievskaja 5/15
Leningrad 190 000
U.S.S.R.

Boris Kudriakov
Svethnoi per. 5.4
Leningrad 190 000
U.S.S.R.

Anatoly Zhigalov
Kashirskoie Str. 132-4
Moscow 115 561
U.S.S.R.

Juri Leidermani
Akd. Ficatova St. 28, Kv. 2
Odessa 270 080, U.S.S.R.

Ghenrih Sapguiru
57/65 Kwartira 39a
Moscow 103 055, U S.S.R.

Serge Segay
and Rea Nikonova
Sverdlova 175, 353660
Eysk, U.S.S.R.

Nekrasius Jonas
SU - 235220, Pakruojis
ul. Makarenkos 39-17
Lithuania, U.S.S.R.

S.N. Stolarenko
Ul. Isniolkoma 3 kv. 32
603003 Gorki, U.S.S.R.

Courtesy John Held Jr., Modern Realism Archive, Dallas, TX

Teaching English in Japan

BY DICK FUGETT

AS POWER and wealth shifted from ancient Greece to Rome there were accompanying cultural changes. For example, wealthy Romans employed educated Greeks as pedagogues to teach their children and thus pass on the older, superior culture that the Greeks were considered to have. Power and wealth have a way of attracting cultural activity. As in Japan today . . .

> Semi-full time Native English teachers needed in Yokohama. Mon-Thur 2 hrs in evening. ¥160,000 per month. Must have degree and proper visa. (03) 234-7928

> In Hitachi full time Native English teacher needed. ¥240,000 per month. Accommodation, Bonus and free Japanese lessons provided. Must have degree, age over 23. (03) 234-7481

> Native English teacher with visa, friendly company class in Asaka, 2 hours Wed evening, ¥8000 412 3065

In the last couple of years seven of my friends have gone off to teach English in Japan. All tell of a rewarding experience, good salary and a much better appreciation of a vastly different culture. They report a thriving industry — teaching English as a Second Language, or ESL. The employers range from universities and high schools to corporations, language schools and private study groups.

With the yen currently around 140 to the dollar, salaries seem eye-raisingly high for a job that at first appears only slightly more difficult than falling off a log — spending 20-30 hours a week just *talking*, often based on a lesson plan that's handed to you. But keep in mind that in dollars the cost of living in Japan can be double what it is in the US, and even higher in major cities. And how about coming up with five months' rent in advance to get an apartment — it's called "key money" — or $700 to have a phone installed?

All Japanese adults have had at least six years of English, but language studies are straight out of the Dark Ages — reading, writing, and a stupefying dose of grammar. The survivors of this dismal rote-learning are great at diagramming sentences, but when it comes to speaking — forget it. Those who continue studying do so for different reasons — for some it's a prestige skill, for others it's a business tool. And always in the background is the curious love/hate relationship that Japanese have with the US, balanced between the glamor of the powerful American image and the devastation of WWII.

A job applicant who's obtained an ESL credential from a US college and has teaching experience is quite desirable in the eyes of any employer, as well as qualified for university positions. But since there aren't many people with that background, corporate and commercial language schools settle for less — a native speaker with a BA in anything. That BA is quite important and the diploma should be available during job hunting, for it gives credibility not only to teach English, but more importantly, American *culture*, a topic of extreme interest to the Japanese. To a large degree all North Americans (Canadians are considered almost as good, since their culture and accent are equal) teaching in Japan are a status symbol, showing that the school or company has a *genuine* English speaker.

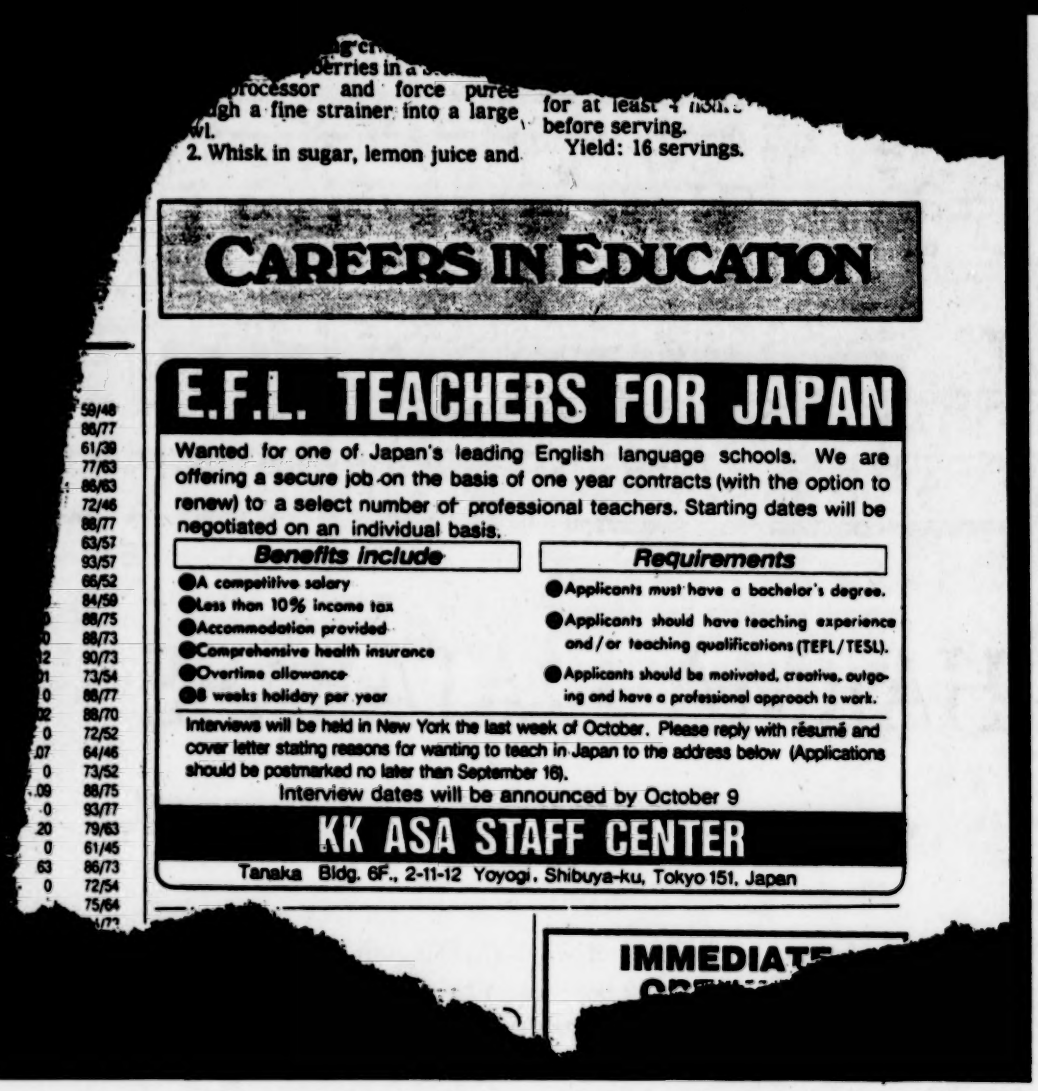
Appearance is most important in Japan. And since the job applicant is in effect selling his or her connection with the type of American culture that the Japanese find appealing, it's no surprise that a conservative, yuppie image is most attractive to employers.

Securing a job before leaving the US can reduce job-hunting stress and simplify getting a work visa, but it's a mixed blessing. Salaries offered may be lower than those available in Japan, plus there's no way to check out the city or the boss.

Most people go to Japan first and then job-hunt, in which case their most important asset will be *connections* — knowing someone who can give a recommendation to a future employer who understandably fears hiring a total stranger. Knowing someone who has worked in Japan is thus a major asset, but it's also possible after arriving to meet people in the foreign community who will be references and pass on job tips. Keep in mind that a couple of months can pass before landing a job, and given the cost of living, that means a prudent traveler would need to have a minimum of $2,000-$3,000 to draw on. Being underfunded forces one to take the first job that comes along, and it may be crummy. Studying a little Japanese before departure is also an excellent idea.

The best source of job listings is the *Japan Times*, in particular the Monday edition, in which Help Wanted ads flourish. There's also an English-language magazine in the Kobe/Osaka/Kyoto area called *Kansai Time Out* that's good. The YMCA hires many teachers and the Japan Association of Language Teachers puts out a monthly magazine with job ads.

Visas need a story of their own, but briefly: a work visa is legally necessary to hold a job and a job is necessary to get a work visa. There are also cultural visas for those wishing to study a wide range of subjects ranging from pottery and papermaking to dance, gardening and the tea ceremony. The cultural visa can cover employment, too, but it gets



complicated. Consult your nearest Japanese consulate for details.

While a high-paying job overseas sounds attractive, there's always Reality, which can include unresponsive students, unpleasant bosses, cramped living quarters, and always being a *gaijin*, or foreigner (literally "outside person"). The difficulties of being a gaijin range from the near impossibility of making friends due to the language barrier to being stared at in public places. On the other hand it also means being pardoned for most gaffes since that's the nature of gaijins, who are inherently crude, loud and aggressive. As a five-year resident of Japan put it, "Once a Martian, always a Martian." Gaijins can also be open, outgoing and frank, qualities the Japanese admire but feel they don't have. It's all part of the wonderfully rich cultural stew that comes with the good salary and final bonus — an expanded understanding of yourself and a broader world view, the reward of putting a hell of a lot of effort into a challenging situation.

Jobs in Japan is the unanimous recommendation for first book to read if you're considering going to Japan to work. It's now in a third edition and makes excellent preparation for the journey.

A followup book by the same author is *Teaching Tactics*, which emphasizes the teaching situation. For a good selection of books on Japan, contact Kinokuniya Books, 1581 Webster, San Francisco, CA 94115 (415/567-7625). They do mail order by phone.

Japan Times
Sample copy

$4 from:
OCS America, 1684 Post Street, San Francisco, CA 94115; 415/931-0396.

Jobs in Japan
John Wharton
Third edition 1988; 263 pp.

$12.95 ($13.95 postpaid);

Teaching Tactics
John Wharton
1986; 140 pp.

$6.95 ($7.95 postpaid)

Both from:
The Global Press, 1510 York Street/Suite F-204, Denver, CO 80206
(or Whole Earth Access).

•

"Key money" has developed in Japan simply because housing is a seller's market (the landlords can get away with it) and the Japanese value stability over simple profit. The system is *extremely* effective in getting people to stay put once they've taken an apartment. And once you've put down 4 or 5 month's key money, you too will feel rather unwilling to leave, knowing that you're liable to get back only *one* of those month's rent and that the next place you live will expect the same amount of key money. WHEN YOU TAKE AN APARTMENT, BE ABSOLUTELY CERTAIN YOU'LL BE STAYING A GOOD LONG WHILE. THEN STAY PUT!

•

The Japanese, by nature, are a very shy and unassertive people individually. They are also perfectionists and are extremely reluctant to display any skill without having nearly mastered it through self-study. Language acquisition, of course, won't allow this method of learning; the student *must* try to use the language and make many, sometimes foolish errors which are corrected repeatedly — ideally in a kindly fashion. Because this obvious lack of mastery is extremely embarrassing to Japanese students, a teacher must be gentle, supportive and very encouraging with them if he or she hopes to be a success at the job.

•

If you're working part-time for a school, it has practically no control over you. There is a *very* high turnover of part-time instructors as novices are hired, then find better work elsewhere, only to be replaced by yet another newcomer. Don't feel bad about working for a less than stellar school for something short of super wages at first; just don't get *stuck* at a place like that. Keep your eyes and ears open for opportunities to improve your situation; it takes several months to really get a feel for the ESL scene in Japan. Connections, needless to say, are the key to real success.

•

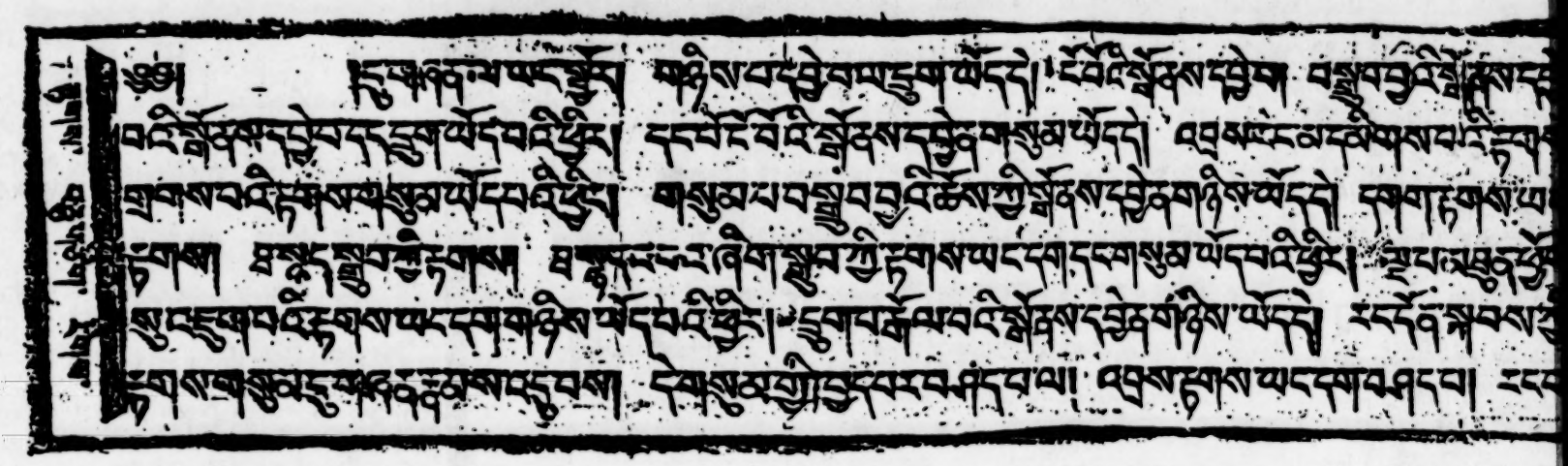
Those who are *really* serious about stuffing their futon's with yen, however, should seriously consider starting their own mini-school, thereby bypassing the middleman, namely the school that hires them to teach its students. Just start telling your neighbors that you're willing to teach a class in the area and charge them less than what they'd have to pay to go to a real school. You can hold the class in your apartment or someone's house and, because you have no overhead to pay, your rates can be very competitive indeed. In all though fairness, though, you should slide the "per student" hourly charge down as the number of students increases.

The students, of course, will be delighted to be learning from a real native speaker — who is also a neighbor — and to be paying so much less than what they'd have to pay a school. If your fees are substantially less than a school's, you'll soon have more students in both classes and tutoring sessions than you'll be able to handle.

•

More than likely, you will find most of your best-paying jobs through friends and friends of friends. Japan is the land of connections and you, as a very special, somewhat mysterious and certainly interesting foreign person should have no trouble finding your way into the upper echelons of ESL opportunity — if that is where you wish to be.

—*Jobs in Japan* ■



THE DHARMA DATABASE

BY JOHN MALPAS

SEVERAL YEARS AGO, my college friend Mike Roach instigated a bold plan to make the greater part of Tibetan Buddhist literature (the Kangyur and Tengyur collections) available to the world in a transliterated, machine-distributable form. Since the whole corpus of the literature is now available only in the Tibetan language, the plan involved massive amounts of data entry to be performed by young Tibetan monks at Sera Mey Monastery in southern India. The plan shifted into high gear last winter, due in part to the benevolence of the Packard Foundation for the Humanities. I agreed to spend the month of March setting up the operation, which included designing the work flows, teaching MS-DOS office automation skills to a group of teenage monks, and writing custom editing software. I found life in the Monastery to be amazing.

Five hours south of Bangalore in Karnataka State, India, Sera Mey Monastery shares a hillock with its sister (and, by some accounts, rival) monastery, Sera Jey. Together, the two form what looks like a medieval village.

The Tibetans have been in this part of India since 1962, when the government of India allocated a huge tract of wilderness to the government of Tibet in exile, which divided it up between various monasteries and groups of lay Tibetan farmers. The hot climate here is not what any Tibetan would have chosen, but moving here was a big improvement over the refugee camps in northern India where most Tibetans spent the first years of their exile. Today there are five functioning monasteries within several miles.

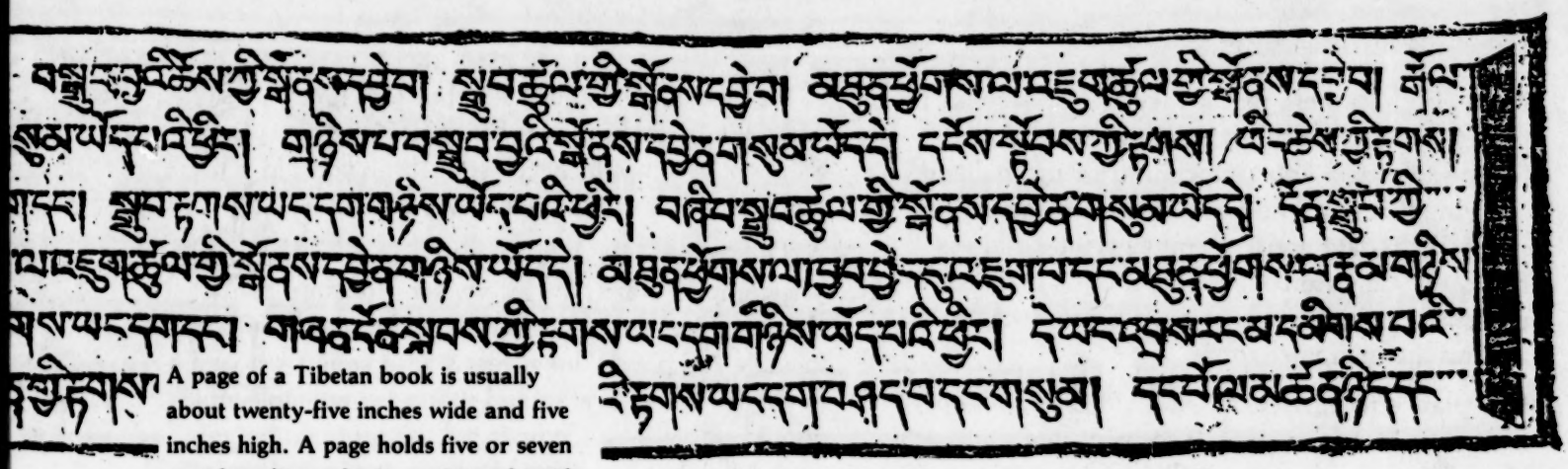
Everybody knows the Chinese drove many Tibetans from their homeland in 1959, but what's happened to these exiles since then receives scant media attention. The dissemination of Tibetan Buddhist teachings (dharma) to the west has been one result. Here is a story from India about an electronic short-circuit that uses computers to move publishing from wooden-block printing directly to the laser. Behind these adaptations lies the real issue — cultural survival.

John Malpas develops trading systems for mortgage-backed securities on Wall Street. —*Richard Nilsen*

A Monk's Education

Monastic education is divided into two phases: pre-debating, and debating. In the pre-debating phase, students attend the monastery school and study secular subjects. The debating phase begins at age sixteen for a typical student. If a student goes straight through with no breaks, the debating phase lasts sixteen years. The curriculum for each year is rigidly prescribed as a set of classical texts to be memorized and debated. At the end of sixteen years, a student has earned his *Geshe* degree.

Debating class happens six days a week, two hours per session, one or two sessions per day. Here is how it works: four or five students will form a group, and divide themselves into an active and a passive team. The passive team sits, and the active team stands up facing the passive team. One member of the active team has the floor. He develops his argument point by point, delivering each point with a stamp of his left foot, and a thrust towards the passive team in which his right hand strikes his left hand with a piercing slap (the image is of an arrow being released from a taut bow). Members of the passive team may respond to his argument by quietly saying "yes," "no," or "maybe." It sometimes becomes physical when another member of the active team wants to take the floor away from the one who has it — the resulting scuffle looks like wrestling. They debate the books they are currently studying. To prepare for debate class, each student must memorize the whole book, as the style of discourse involves extensive quotation, and no books or notes are allowed on the debate ground. All of the books they study concern the



A page of a Tibetan book is usually about twenty-five inches wide and five inches high. A page holds five or seven very long lines of text, positioned inside of a box in the middle of the page. There may be illustrations on either side of the box. There is no graphical word delimiter (such as a space in Western languages), but syllables are delimited by a dot, and phrases and sentences are delimited by a vertical bar. The pages are never bound, so a book consists of a stack of pages wrapped up in a cloth.

The page to the right is a computer printout of the woodblock text in part of the page above.

same subject: what one can expect to find in very advanced states of meditation.

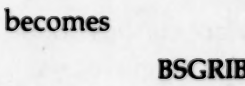
The three-hour evening debate class in the temple courtyard ends at 10 PM. Now begins the final phase of daily monastery life: memorizing time. Everyone engaged in religious studies at the monastery has something to memorize. The common technique is to put lines of the text into a singing form. When a student has almost mastered a page or so of text, he will go outside of his house without the text and walk up and down in the street singing it over and over. From ten to midnight every night the streets are full of singing memorizers. Cacophony is avoided because memorizers will conform their pitches with those of other nearby memorizers, which results in a sort of multiple-text choral effect. Midnight is the official cutoff point for vocalized memorization. After the memorization has stopped, the dogs take over. Barking sounds from all over the Monastery feed off of one another for a long time. It finally gets quiet around 3 AM.

Monastery Automation

For the classical Tibetan texts studied at the monastery, the principal method of book reproduction until recently was wooden blocks. A skilled carver would carve the negative image of a page of text into the face of a smooth block of wood. A set of several hundred such blocks constitutes the "plates" of a particular edition of a book. A monastery would consider an ancient set of blocks for a particular book to be an important part of its heritage. The literature is in danger today because many such sets of blocks were lost in the move to India, and some books exist only in hardcopy form. There are almost no skilled woodcarvers left, and few monasteries can afford to commission a new edition of a classical text.

One point of our computer project is to make new editions of the classical texts possible, by getting them into machine-readable form and then letting a laser printer do the work. The main point, however, is to make a digital standard (ASCII) transliteration of the texts available to any scholar who wants them. From Mike's point of view, if this availability results in more of the texts being translated into English, all the better.

At the beginning of the project last fall, thirty students were trained to type in two shifts. In the week prior to my arrival, Mike taught them transliteration. This is the process of converting words written in the Tibetan alphabet character-by-character into the Roman alphabet, so that something originally written as



becomes

BSGRIBS (the transliteration),

which means

OBSTACLE (the translation).

In order to get the young monks to work harder, Mike tells them that he plans to select twenty out of the thirty who are best at both typing and transliteration, and cut the other ten from the project.

Several days after my arrival, we have trained the teenagers to use a word processor. They are all busy practicing transliteration. Thubten, the manager, passes out pages of one of the Tengyur books. Each person props his page under the screen, while Mike walks around looking over shoulders and correcting.

Mike also tells them that if they are too slow or imprecise, he will cancel the project here and give it instead to a data-entry subcontractor in Thailand. To bring this point home, he has hung pictures of happy Thai data-entry operators typing address labels for American supermarket mass mailings (the real stuff of the international data entry market) around the computer room.

Our plan is to have each text divided into five-page segments, and to enter each segment into a physical file. The size of the file is deliberately short to minimize the deleterious effects of power outages, faulty disks, packages lost or irradiated in the mail, etc. Each segment will be entered twice by two different people. An editor will go through the two initial files word by word using an active file-comparison program. The result is a composite, corrected version of the segment. A second editor will do this again. A third editor will compare the results of the previous two editors. Finally, the third editor will pass the final file through a program that translates it back into Tibetan characters on the screen, and compare this result with the original. We hope the segment will be perfect by the time it reaches the United States.

One afternoon without Mike to translate, I try to explain the editing process to the teenagers. I draw many diagrams, trying to make the succession of files look like a sort of lineage. I have an uneasy feeling that they are going to have to learn to use the software behaviorally, which is to say, do everything wrong that is possible to do wrong at least once. Interestingly, unlike people in New York who use my software, when something bad happens, the young monks tend to blame themselves and not the software.

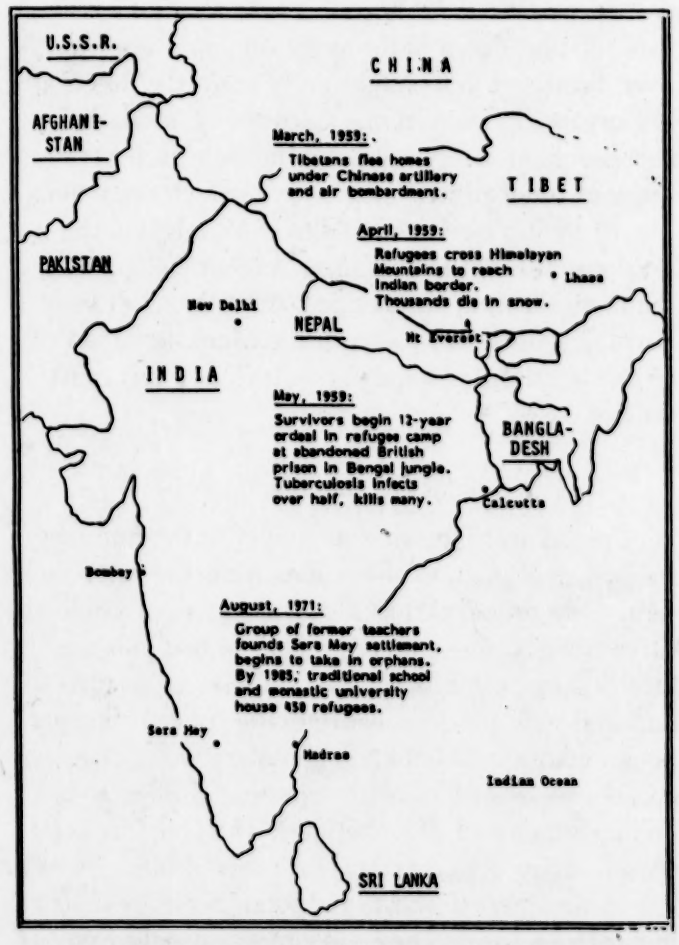
After consulting with Western Buddhist scholars, Mike has chosen books totaling 2,300 pages to be entered first, and we hope that they will be finished in six months. Mike agonizes over how to pay the teenagers: if he pays them per page, they may sacrifice quality for volume. If he pays them by the day, they may not take the production goal seriously and waste a lot of time. We finally opt for a per-page formula with penalties for excessive errors.

Many people around the monastery are curious about the computers, and drop in from time to time to see what it is all about. One monk looked at the glowing green lines of Tibetan text going by on the screen and said: "It's like a dream." The Abbot, a distinguished-looking gentleman reputed to be a great debater, dropped in for an unexpected visit one morning. We show him one file converted back to Tibetan characters. The final editor for this file was Jamba, who is a good editor, but otherwise has a reputation as a goof-off around the monastery. I get along with Jamba because he is not afraid to try to speak English, and he has found things to do with the software I've never told him about. The Abbot carefully checks some of the screen text against the original text, and seems to approve. I say in English that Jamba is one of the best editors, and the Abbot pats him on the back. Jamba looks down; the Buddhist ethic is that to accept a compliment for something you did is to nullify any merit you might have accumulated by doing it.

The computers are hardy, low-tech, Indian-made XT clones. Most have a single floppy drive and 256K. Reliable AC power, however, is an ongoing problem. Power from the local Indian utility is unreliable and unpredictable — sometimes it stays off for days at a time. Mike has had a diesel generator installed in a shed outside the computer room, and we are using it almost constantly during working hours. One morning in the middle of a data-entry session, the generator runs out of fuel unexpectedly, and all of the computers go dead. Everybody leaves the computer room and goes out to the shed. One monk refuels the generator and gives it water, and another starts it up with a hand crank. It erupts in a black cloud of diesel stink. After a few minutes it starts to run smoothly, and we can go back to work.

Tibetan Community

One day after work, I meet Sangyay, a teacher at the Monastery school who speaks English well. He invites me over to his house in the nearby Tibetan settlement to meet his family and get a soda in the local restaurant. He tells me there are 14,000 Tibetan lay people who live in this part of Karnataka State. The settlement itself is charming: most houses have a green prayer banner attached to a bamboo pole out front. He tells me about the problems of Tibetan refugees in India, and which international relief organizations



The migration path of Tibetan refugees.

Malpas

With calisthenic movements, monks stamp their feet and thrust their arms in a debating class in the temple courtyard.

SOFTWARE USED

Training: *IBM Typing Tutor;* **Production Data Entry:** *Norton Editor;* **Production Data Editing:** *Tibetan Text Processing System.* This program displays/prints transliterated Tibetan in Tibetan characters, and incorporates a rule-based spelling checker. Written by Stephen Bruzgulis and Geshe Lobsang Tharchin. Available from Asian Classics Input Project, Box 57, Princeton Club of New York, 15 West 43rd Street, New York, NY 10036. The *Active File Comparator,* which compares two files character by character in two separate word processor windows on a floppy-only system, was written by John Malpas using Aztec C and the Curses window library from Aspen Scientific. Available from Asian Classics Input Project (mentioned above).

have helped out over the last thirty years. He mentions the good old days when the United States sent wheat to India in bags marked "Gift of the People of the United States," and we discuss what has happened to American attitudes since then. The restaurant is also a motorcyle repair shop and dairy farm.

When the Chinese communists first came to Tibet in the fifties, they classified the society they found there as "feudal." Sangyay, although he is too young to know it first-hand, explains that pre-exile Tibetan society was feudal in many ways: there was a handful of very privileged aristocratic families who owned everything. This aristocracy also provided primary financial support for the monastery system. The Chinese viewed the monasteries as accoutrements of the feudal ruling class, and expected that when they broke the power of the aristocracy, the influence of the monasteries would disappear soon thereafter. But after all of the Chinese actions to liberate Tibetan society (e.g. land reform, razing monastery buildings to the ground, repressing outward forms of Buddhist worship), the Tibetan peasants continued to support the monastic institutions.

In the exiled Tibetan communities today, there is no trace of an aristocratic class. While they certainly felt the blow of physical destruction and disorganization thirty years ago, the monasteries have adapted to the changed circumstances, and in some cases are flourishing. A monk explained to me that, prior to exile, it was not the custom for Tibetan religious teachers to travel to other countries in order to teach, and today that is very much the custom. The burden of financial support for the monasteries has shifted to groups of westerners studying Buddhism in Europe and America.

One evening, people all over the monastery are glued to their radios listening to the BBC external service about the latest trouble in Lhasa, Tibet. Lothar, the monk who is acting as my guide, is solemn as he explains how some monks and nuns were shot by the police while saying a prayer in a public place, and a riot ensued. The trouble in Tibet is never far from anybody's mind here, and the flood of refugees (some covered with bruises) are a constant reminder about what circumstances are like there.

Several days later is Tibetan Uprising Day, a day commemorating a short-lived and abortive attempt to resist Chinese annexation in 1959. People are taking it seriously this year in light of the recent massacre. In the computer room, I find little scraps of paper on which is written the same thing in different hands: "I remember my Fatherland."

On the day itself, monastery operations shut down, because half of the monks are going to Mysore (the nearest big city) for a pro-Tibet demonstration. In the morning, the young monks are collecting in the street with signs that say things like "UNO is Blind to Tibet" and "Might is not always Right." They climb onto a farm wagon pulled by a tractor, and into various other pieces of farm machinery, for the long drive.

By now my confidence in the young monks on the computer project is growing. Data entry and editing have settled down to a steady pace. I wish they would share information among themselves more readily — as it is, I often have to repeat many times a tortured explanation (in English, pseudo-Tibetan, and diagrams) of a single problem that they are all likely to encounter sooner or later.

On my last day at work in the computer room, I pay the guy at the restaurant to bring down sodas and cookies for the mid-morning break, as if this was a catered computer seminar at a Holiday Inn. It takes the young monks by surprise, and they respond favorably — it gives a ceremonial flavor to our last day together. I tell them I hope to be back next year. ■

Video Night in Kathmandu

While traveling through Nepal and Thailand earlier this year, I was stunned by how odd bits of Western culture had been filtered and absorbed into the body of Asian culture. I saw Rambo posters tacked to the walls of mud-and-thatch huts by the banks of the Indrawati. At a Nepali wedding, the music alternated between a local marching band and U2 bootleg cassettes. In Thailand, Levis jeans were such a status symbol that the price of black-market knock-offs had risen to around $80, almost four times the price of real Levis.

Similar sights make up much of Pico Iyer's book, ***Video Night in Kathmandu****. The book takes its title from the odd proliferation of video clubs that have sprung up in Kathmandu in recent years, in a country where a VCR costs as much as a house. Iyer also gives you a look at life in mainland China, the Philippines, Burma, and Bali, as well as a tour through the flourishing skin trade of Bangkok, and a glimpse inside the enormously successful Indian film industry, with tips on how to remake an American movie into an Indian movie (lose the nudity, profanity, and ambiguity of character; add a plot twist every three reels, some singing and dancing, and a happy ending).*

Occasionally, Iyer's glib news-magazine prose style (he was a staff writer for ***Time****) gets wearing, reducing both the profound and the banal to the same easily digestible thought-bites. However, Iyer's ease as a traveler, and his eye for detail, often shed fascinating light on this exciting and rapidly changing part of the world as we approach the age of the global teenager, and global mono-culture.*

If you've never traveled or never traveled in the East, this book might just be the thing that gets you to buy a ticket.

—Richard Kadrey

Video Night in Kathmandu
Pico Iyer, 1988; 376 pp.
$9.95 ($11.45 postpaid) from Random House/Attn.: order dept., 400 Hahn Road, Westminster, MD 21157; 800/726-0600
(or Whole Earth Access).

•

I had come into town the previous afternoon watching video reruns of *Dance Fever* on the local bus. As I wandered around, looking for a place to stay, I had noted down the names of a few of the stores: the Hey Shop. The Hello Shop. Easy Rider Travel Service. T.G.I. Friday restaurant. And after checking into a modest guesthouse where Vivaldi was pumping out of an enormous blaster I had gone out in search of a meal. I ran across a pizzeria, a sushi bar, a steak house, a Swiss restaurant and a slew of stylish Mexican cafés. Eventually, however, I wound up at T.J.'s, a hyperchic fern bar, where long-legged young blondes in tropical T-shirts were sitting on wicker chairs and sipping tall cocktails. Reggae music floated through the place as a pretty waitress brought me my corn chips and salsa. . . .

I was, of course, in Bali, the Elysian isle famous for its otherworldly exoticism, its cultural integrity, its natural grace.

•

There, inside an inner sanctum, sat fifty or so men on folding chairs, absolutely silent. We slipped inside, sat down and looked toward the front of the room. On a small color TV screen, a pudgy Indian actor was shaking through a parody of Michael Jackson's contortions in the "Thriller" video. We watched for a while, then tiptoed out again. There were fifty video clubs like that in the neighborhood, whispered Pappy. They charged 2, 3, 4 rupees. Some showed Hindi movies, some kung fu. Some offered 2-rupee admission for children. But competition was tough. And a VCR cost 50,000 rupees ($3,000), fully as much as a new house. *[Nepal]*

•

More Chinese had watched the Super Bowl than had Americans. And China was already leading the world in American Express frauds.

•

My friend . . . followed the leather-jacketed young man through the darkened, empty streets. "I come from Tibet," he told her as they walked, "and my name is Lobsang. But you can call me Lobby."

They arrived at the flat, and Lobby turned on the light to reveal two large posters: one of the Dalai Lama, the other of Rocky. His family, he explained, were all Tibetan holy men, but the medallion he wore around his neck had been given him by Sly Stallone. *[Nepal]*

•

"We solve you all Travel Problems," promised Pawan Travels, "and make you Journey Easy and Funny."

•

I had thought, when first I visited the Orient, that I would find myself witnessing the West in conquest of the East, armies of its invaders bearing their cultural artifacts across the barren plains of Asia. Yet the discovery I made most consistently throughout my travels was that every one of my discoveries had to be rejected or, at best, refined. And as I got ready to leave the East, I began to suspect that none of the countries I had seen, except perhaps the long-colonized Philippines, would ever, or could ever, be fully transformed by the West. Madonna and Rambo might rule the streets, and hearts might be occupied with secondhand dreams of Cadillacs and Californians; but every Asian culture I had visited seemed, in its way, too deep, too canny or too self-possessed to be turned by passing trade winds from the west.

•

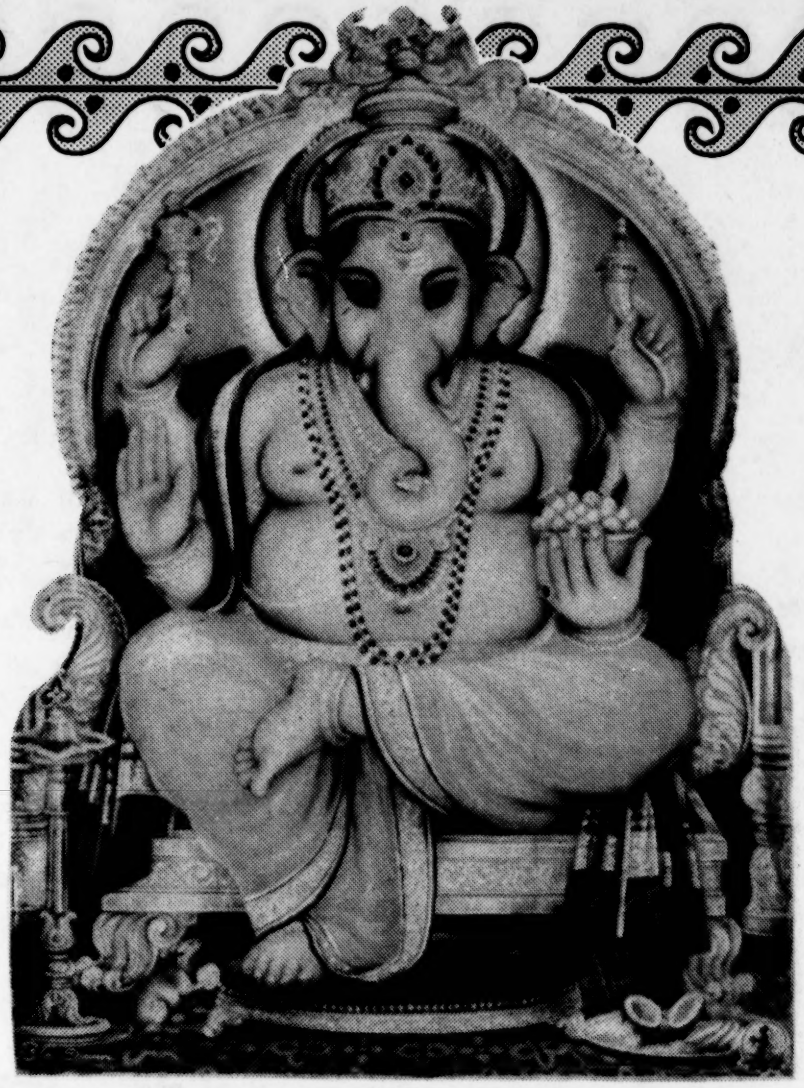
Hindi movies were not just everywhere in Asia; they were everywhere in the world. A Turkish cabdriver once gave me a lecture on Raj Kapoor as we drove to Istanbul's airport at 4 a.m., while a Greek au pair in England once explained how she had first seen the Kapoors at home in her tiny island village. Raj Kapoor's *Aswara* was one of the most popular foreign movies ever seen in the Soviet Union, and in Eastern Europe the same filmmaker was said to be more famous than Nehru or Gandhi. I once saw a Hindi classic playing in Peru. . . .

•

Six months later, I was sleeping in my apartment at six o'clock one Sunday morning when I was jolted into wakefulness by the insistent ringing of my phone. Groggily, I picked it up — to be assaulted by a relentless torrent of words. "Hullo, Pico! This is Joe from Guangzhou! You can call me John now! I am here in Manhattan! It is like a dream to me, it is so exciting. I walked down Broadway last night and saw many black men. It is very strange for me. One man, a strong man, came up and asked me for money. That was more exciting to me than the Empire State Building. Also, I saw many, many beggars. As you know, we do not have beggars in Guangzhou."

On and on the breathless narrative raced. "It is so exciting here. Everything here is so old. The buildings are old. Even the cars are old. The streets are very dirty. Many fat women call out to me in the streets, 'Come here, baby.' Today, I wake up at three o'clock to write to Wu about all I have seen in New York. You know, it is like a dream to me."

The world had indeed come full circle: here was a visitor from an impoverished peasant nation savoring New York, not for its skyscrapers and limousines — he had seen all that at home — but for its unimagined supply of beggars, prostitutes, filth and Third World anarchy!



A Nepalese devotional icon features the Hindu god Ganesh.

SHOPPING FOR BUDDHAS

BY JEFF GREENWALD

N THE MORNING of Monday, the 19th of October, 1987, I woke up at a place called Gosainkund — a pocket of sacred lakes, dedicated to Lord Shiva, some 14,300 feet high in the Nepal Himalayas.

I'd made the trek up to this holy site with Karen, my state-side lover, who had flown from California to visit me in Nepal for a few weeks. We spent the first spectacular evening performing a *kora* — a devotional, clockwise circuit around the lake — pausing every few minutes to stare west, over the panorama of cloud-shrouded mountains that emerged into the sky. "It looks like Heaven," Karen said. I could see what she meant; how the bolts of sunlight pierced through the clouds and spread like an Oriental fan across the spine of the Himalayas, illuminating the vapors trapped below.

Our accommodations in the one-room Gosainkund Lodge were basic: straw mats on a stone floor. We inflated our therma-rest mattresses, ate some Chinese noodles, and climbed into our bags to sleep.

Sometime during the night, the wind picked up. It began as a low drone, rising and falling with an ominous cadence — like the voices of monks in a tantric choir. We felt icy particles alight and melt on our cheeks and noses, exposed from the maws of our mummy bags. Once during the night I woke up, bladder itching, and felt around. It was weird — everything seemed wet and cold. I flopped back down, damned if I was going to go outside to piss.

I remember the fatal moment when I opened my eyes, and saw that the lodge was full of snow. It had blown right in under the roof and covered us, our gear, our bags, everything. Karen went outside and shrieked — the place was buried, waist-deep in snow, and it was still falling, blowing in furiously, gusting through the shutters and under the roof, an icy, biting, relentless blizzard.

What to do? Wait at Gosainkund, this tiny way-station at 14,000 feet, and risk being marooned forever? Or attempt the descent, along cliff-hanging mountain trails, in a blinding snowstorm?

Our porter tried leaving, dressed in tennies and Karen's

Jeff Greenwald lives in Oakland, California. His first book, Mr. Raja's Neighborhood: Letters From Nepal, *was published in 1986. These stories began as a performance piece in 1988 and have since evolved into a book, due next summer from Harper & Row. They revolve around his attempt to buy a "perfect" Buddha statue while living in the somewhat imperfect kingdom of Nepal.*

—Richard Nilsen

socks, with a woolen blanket wrapped around his shoulders, and returned after five minutes. "Saakdaina." Impossible. The path was utterly invisible, totally snowbound. An hour or two later another Nepali came staggering in. He brought horrible news. There was a dead woman on the trail, he said. Frozen. She'd been on her way to Gosainkund last night, when the storm hit. . . .

But Gosainkund was no place to hang around. We would die of sheer boredom if we had to wait there another two or three days. No; there was nothing else. The storm might let up in ten minutes; it might rage for a week. So, joining forces with a Swiss couple — big, strapping Aryans — their porter, and ours, we bundled ourselves up in every bit of clothing we had, and set off down the mountain.

The first hundred steps were sheer panic. Snow up to my crotch; stumbling, falling, trying to follow the deep blue footprints left by the Swiss couple plowing on up ahead. The path had been so magnificent yesterday morning — now it was Death's cakewalk. Karen was nearly hysterical at first, blindly blundering along, an LA girl consummately out of her element. As were we all.

But the worst was yet to come. Rounding the edge of the lake, we found ourselves on a high, unprotected ridge. The wind howled furiously, blinding us with ice needles, trying with all its might to blow us off the mountain, over the sheer drop that lay some six feet to our left. Left hand frozen, eyes frozen, frozen snot cracking off my face, I clung desperately to the back of Karen's pack as the wind shoved her pitilessly toward the edge of the universe.

It was the most terrifying thing I had ever experienced in my life.

In the distance, beyond a white haze, I could see the hardy Swiss couple vanishing from sight. They plowed determinedly onward — followed by our pathetically attired porter, whose meager blanket whipped uselessly across his thin shoulders.

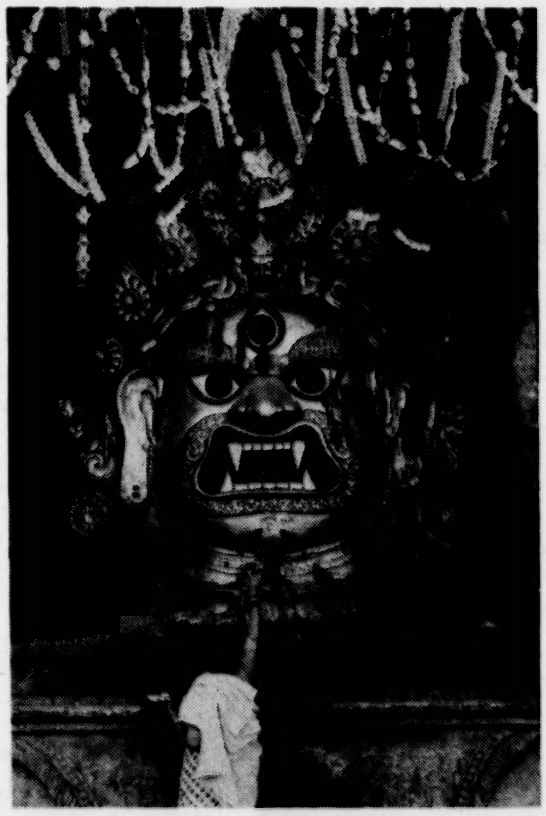
Above our heads dead birds, wings broken and shredded, flew through the air like shrapnel. I gripped Karen's hand with numb fingers as we cut down from the ridge and turned directly into the blinding snow, tripping and falling every other step. At one point I just lay there, spreadeagled, like a drowning man — ready to give it all up. To just surrender, stop fighting this terrible deluge.

But no — we hauled ourselves up, convinced that we could reach the first teahouse, another half-hour at most — we could see it, a safe haven of boiled water and shelter, far, far below.

We stumbled onward, praying and rolling down the mountainside, and arrived just in time to see the roof blowing off, and the little family that lived there fleeing for their lives, with all their belongings, including three children, strapped to their backs.

There was no more path, no more objective reality at all. I watched, stunned, as the Sherpa family leaped into the river — a raging, muddy torrent — and ran with it. They knew, in their infinite mountain wisdom, that it was flowing down, down, and down was where we wanted to go. We followed them, running blindly, slipping over frozen stones in animal panic.

An eternity later we arrived in the village of Sing Ghompa. We had dropped thousands of feet; it was pouring rain. There were two rooms left at the lodge. We fell in out of the storm, into the dining hall, and immediately met the dazed, disbelieving stares of thirty Israeli trekkers, who were drinking rakshi and singing Hebrew folk songs. The Swiss couple vanished immediately. Karen and I drank tea and ate chocolate, finally building up the strength to crawl down the hill to our room.



The mask of Seto Bhairav, one of 64 wrathful manifestations of Shiva, in Kathmandu.

Jeff Greenwald

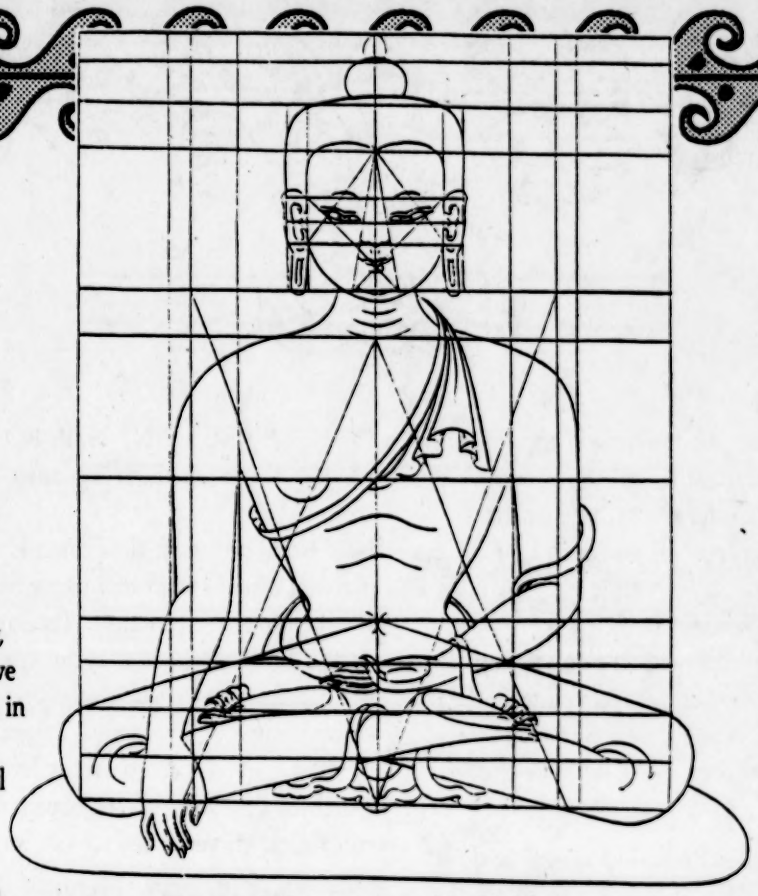
Not a single thing in our packs had remained dry: socks, cameras, Band-Aids, batteries — everything was soaked through and through. We hung our soaking-wet clothes over every surface, and collapsed, utterly spent, onto our cots.

Lucky, so very lucky to be alive.

"Oh, shit!" I screamed.

"My God, what's wrong??" Karen looked at me in panic.

"Look at the foam pads they put on these cots! Jesus, — they're the thin ones! We had such nice, thick ones in that upstairs room, two days ago. What a rip-off! How do they expect us to sleep on these?!"



The canonical proportions of the Buddha image.

AS SOON AS WE GOT back to Kathmandu, we heard about the stock market crash. It had occurred on Black Monday, the very same day that we had almost lost our lives in the storm — one of the worst storms to hit Nepal in recorded history.

At that moment I was enlightened, and realized: "Life and wealth are transitory. The only way to protect yourself against these implacable truths is to put your money in Buddhas. That way, even if the stock market crashes, you have something real, something that will continue to appreciate in value. And even if that fails — if the market for Asian art completely dries up — if there's a nuclear war or something — well, then, you still have the Buddha, and you can learn non-attachment from it."

NOW THAT I KNEW PRECISELY what I was after, at least as far as Buddha statues were concerned, the next step was finding it. This proved to be just a shade more difficult than I had imagined, despite the fact that in Kathmandu — as well as in the neighboring village of Patan, famed for its ancient tradition of metal-casting — whole districts of "curio" shops offer on-sale deities. Tara and Ganesh and Manjushri, Durga and Shiva and Padmasambhava, an all-star cast of wrathful, compassionate, voluptuous gods and goddesses gleam behind warbled panes of cheap Indian glass.

I embarked upon these adventures in shopping in the company of Nancy, a friend with whom I had recently traveled in Tibet. Known for her infectiously buoyant personality, Nancy had recently joined the ranks of the walking wounded. She had fallen in love (or "merged," to use her favored phrase) with an exquisite statue of the goddess Tara. The Tara had been one of a kind, breathtakingly beautiful, but a bit beyond her means. Nancy had deliberated and, all but convinced, decided to sleep on it. Unfortunately, a somewhat more experienced buyer entered the shop a few moments after she left. Nancy rushed back first thing the next morning, bristling with those natural amphetamines that permeate the bloodstream just before a large and important purchase — only to discover that her Tara had just been given a one-way ticket to Dusseldorf.

THIS CRUSHING DISappointment colored, to an alarming extent, the way that Nancy and I went about our rounds. There was a need for non-attachment, to be sure; but also a prerequisite of knife-like resolve.

It was as if, here in this distant, exotic land, we were compelled to raise the art of shopping to an experience that was, on the one hand, detached and almost Zen-like — our ultimate goal was, after all, enlightenment — and on the other hand tinged with desperation, like shopping at Macy's or Bloomingdale's during a one-day-only White Sale: viciously predatory, and laced with the fear that the choicest Buddhas would be gone, snatched up if we hesitated too long, or neglected to visit each and every shop the very day that new work was due to arrive. Because, in spite of the deceptively vast quantity of statues displayed in the windows and on tattered blankets covering the sidewalks outside of the major hotels, most are chintzy rubbish; the ill-conceived abominations of a tourist-trap industry.

Some archetypes! If these were real humanoids they'd be barred from military service: club footed, triple-jointed, bug-eyed, eleven-toed, elephant eared abominations with monkey-long limbs ending in paw-like appendages, with bronze or copper flashing festering like mold under the armpits: the kind of thing you wouldn't even want to use as a paperweight. Some were so ill-proportioned, they flew so hard in the face of anatomy, that I had to wonder if the artists had ever seen a human being before. The statues reminded me of those old European drawings of elephants and rhinoceri, based on distant sightings or wild rumor.

And then there were the copies. Back in 1984, when I was shopping for my first Ganesh, I found a very handsome one copied from a statue in the National Museum. By now, though, all those first-generation duplicates had been sold. The copies made from the copies were also gone; as were the copies made from the copies made from the copies. And with each consecutive recasting, you can be very sure that something had been lost in the translation.

For example: imagine taking an original Rembrandt drawing, and photocopying it on

a primitive machine. You now put the flawed copy back on the glass, copy that, and repeat the whole process another three or four times. Come the fifth generation, you're holding something that looks more like a Franz Kline than a Dutch Master. Likewise, by the time Nancy and I encountered them, the 1987-model Buddhas were little more than crude lumps of bronze heaped into vaguely recognizable postures. Their feet and fingers exhibited the terminal stage of leprosy, while the faces — those all-important, so-serene Buddha-faces — looked like they'd just gone 12 rounds with Jake La Motta.

But I'm making it all sound like a hopeless quest, and that's nowhere near the truth. Because every so often, in one of maybe three or four very exclusive shops — and not in the front foyer, but concealed in musty back rooms — we would discover a statue that made me sigh with a feline growl of primal longing. These were statues that crossed the Pygmalion line, and seemed fully infused with life.

Half-closed eyes, perfectly centered and just a hair downcast; the corners of the mouth curving up, so, so subtly, into what might be a smile. That smile is more than an invitation; it's the whole party.

Those statues are few and far between, hidden in drawers and cupboards, wrapped in rice paper and string, but always outlandishly expensive, and reserved for some Japanese or German buyer. We were lucky enough to even *see* them; the mere knowledge that these statues existed, that the Nepalese still created objects with this much grace and power, was a truth reserved only for the most persistent, impulsive collectors: people who would *kill* for a really good Buddha.

AND SO IT GOT TO THE POINT where we shopped with consummate singlemindedness of purpose. We would look only at the best. Often we would enter a shop and, barely glancing at the inferior products on the shelves, demand instantly to be taken into the back room to see the newest, the latest, the most expensive work. We were the elite; the ones who knew the veins and arteries of the business. We were connoisseurs of Buddhas, or Taras, of Manjushris; and we begged not to be insulted by clumsy or sloppy workmanship.

And here I beheld the first of many twisted Zen truths pretzeled throughout this crazy koan called Shopping for Buddhas: Only through the yoga of true pushiness, only by being relentlessly pushy in the most charming possible way, would I ever find the prize that I was seeking: A Buddha that really said something; or, a Buddha that really said *nothing* — and said it loudly enough for me to hear.

THERE ARE MANY NEW ROADS in Kathmandu — the oldest of which is named "New Road."

New Road begins at the Tundhikhel Parade Ground, and plows a broad swath through what has become, such as it is, downtown Kathmandu. I steered my rented clunker — an Indian-made Hero bicycle with tassles streaming from the handgrips — through the brightly painted arch, flanked by images of Shiva and Ganesh, and glided to a halt at the first *gundpak* shop on the left. I bought fifteen rupees' worth of the sweet, nutty brown mass. It was wrapped, still warm, in yesterday's New York Stock Exchange report.

Then it was off again, past the inveigling displays of the gem and jewelry shops; past Vision Stationery and New Human Fit Tailors; past shops selling soccer balls and trikes, chutneys and donuts, King and Queen plates and Singer sewing machines; past a crowd of Nepalese massed before a storefront, watching color photographs spew from the maw of an instant processing machine; past the steel-shuttered windows of the American Cultural Center, with its dramatic display of Space Shuttle photos; past the ancient pipal tree, beneath whose spreading branches lay broad plastic tarps blanketed with rows and rows of local newspapers and magazines; past Central Drug, 21 flavors ice cream, Optic Nerve, enormous black bulls chewing complacently in the road as traffic swerves obediently around them . . . and in the windows of the tour agencies I can read the brightly lettered signs saying,

VISIT DAKSHINKALI!
LIVE ANIMAL SACRIFICES EVERY TUESDAY
AND SATURDAY!

At the end of New Road is the old royal palace with its towering pagodas and fantastic courtyards populated by gods, goddesses and demons. Not a bad venue for some shopping! But before making that plunge into the giddy world of Buddha-buying, I cycled 'round the staid bronze statue of Chandra Shamsher Jung Bahadur Rana, stopped my bicycle and locked it by a telephone pole at the corner of Dharma Path and New Road. And there I gazed up, face to face with the entrance to the city's most grotesque capitalist monument: three tiers of sooty raw concrete, and a hand-lettered blue and white sign reading "Super Market." This was Bishal Bazaar, Kathmandu's first enclosed mall: a mere seven years old, but already ancient.

I'LL TELL YOU WHY I STOPPED. Some friends had come to town a couple of weeks earlier, and they returned from a stroll one afternoon to inform me that the management of this so-called Super Market had just finished installing an attraction that proved to be the modern-day equivalent

Lord Vishnu depicted on greeting card.

of the Hanging Gardens of Babylon. We're talking about Kathmandu's very first escalator, linking the first and second floors of the gritty enclosed mall.

Now, I'd been by before, hoping to find this marvel of technology in action. As a rule it was broken, covered with an enormous sheet of plastic, like a minor work by Christo. Today, though, contrary to any of my expectations, the escalator was running; and this I had to see.

There were two enormous crowds. One was gathered at the foot of the escalator, where a sneering guard wielding a nightstick pushed the bravest of the brave, one by one, onto the veranda, the no-man's-land at the base of the procession of hypnotic, endlessly ascending steps. A barefoot porter in filthy, tattered rags — some lost refugee from the hills — stood immobilized at the starting line, awed to paralysis by the stream of metal that flowed as if by divine writ from beneath the rubber cowl by his toes. And as I watched, I realized that the man was experiencing a beatific transformation. His knees weakened; and within a moment he was bowing, praying, practically prostrating himself before this divine sight, this river of steel issuing miraculously out of the ground, just as the holy Ganges flows from the scalp of the great Lord Shiva . . . ! The guard reached forward, and jerked him rudely aside.

The next victim was a 12-year-old boy who, poised at the bottom, eyed the rise with all the trepidation of a diver who suddenly realizes that yeah, the high board is really a lot higher than it looks; he swung his arms and took a few deep breaths before closing his eyes and plunging out in his best urban swan dive. Right behind him was an elderly Moslem lady, who took one look and tried to back away; instead she somehow stumbled *onto* the device. At first she kept her eyes closed, and seemed to heave a sigh of relief as her senses convinced her that she wasn't moving after all. But as soon as she opened them, her face whitened into a mask of absolute and abject horror. She clung desperately to the rubber rail, crouched as if for combat, as her sisters, her husband, her sons, her grandsons all faded, perhaps forever, against the backdrop of blinking advertisements far below.

The second mob waited at the escalator's summit, delighting in the huge joke of relative motion. These sophisticated voyeurs — many of them now escalator veterans themselves — shouted with glee as each of the hapless riders was propelled, panicked and staggering, from the apparently motionless safety of the escalator onto the utterly unexpected menace presented by stable ground.

I ran up and down the stairway parallel to the marvelous escalator, enslaved by the realization that I could not leave, could not bear to leave, before demonstrating my utter command, my consummate prowess with escalators. No; I positively could not continue my search for a perfect peaceful Buddha before leaping onto this escalator like a trapeze artist, and wowing these local yokels with a bit of spontaneous street theater.

So, after mingling patiently with the downstairs mob (who ushered me forward with the respect and generosity characteristic of all Nepalese) I found myself at the coveted brink. At first I made a show of trying to back away — and then, letting loose an awful howl, mounted the flying stairway in the most histrionic fashion imaginable, a pantomime of sheer terror, flailing and doubling back, slipping down the railing, disappearing from sight, finally rising to my feet only to be propelled like a rag doll into the waiting arms of the electrified crowd.

Ah, they roared! They loved it! These people! *My* people! I walked back down the steps, Nepalese slapping me on the back. Whew! Hey! What a riot! That was great! *I* was great!

But then the grin slid off my face like a wet towel, because the crowd was captured by a momentary silence. Far below, making their way through the swinging glass doors, a retinue of Buddhist monks entered the Shopping Center. They approached in single file, heads shaven, their robes flowing behind them like a flood of freshly squeezed Florida Orange juice.

The crowd melted, dividing like a cell to let them through. The guard abashedly lowered his nightstick and stepped hastily aside. And the monks, without panic or ceremony, simply mounted the escalator and

rode it

to the next

level. ■

A Spiritual Guide To Manhattan

by Sparrow

I've been meditating 14 years (not continuously, just twice a day) with the Ananda Marga Society — and this is the first time I put it to use, except to relax when drunks picked me up hitchhiking and went 90 MPH. Y'know how they have rainfall maps of nations, with colored sections? I wanted to do a "High Spirituality Zone," "Low Spirituality Zone" map for *my* nation, Manhattan.

This is simply what I did: visited major NYC venues, sat down, closed my eyes and performed meditation. I sat in a rattan Elysee Club chair (Bloomingdale's), on a tourist couch (U.N.), on a marble ledge (Grant's Tomb), on the floor. Depending on my guess about the proprietor, I'd ask permission. I'd sit at least a half hour; some sessions exceeded 1 hour.

Afterwards, I'd write my sensations fervidly on sheets of 8½" X 11" scrap paper. I was surprised how distinct the images were. Perhaps every place does have a "vibration."

Anyone is invited to replicate my research. Please send your findings to: Manhattan Ethereal Survey c/o this magazine.

I began this as a joke on the New Age idea of "power places," but as my studies proceeded, I began to think Manhattan was one.

Experimental nonfiction is not attempted often enough. When a quiet, almost timid, voice belonging to a poet named Sparrow (I have no idea what his real name is) called me up and said he'd like to have a note to help him map the spiritual contours of New York City, I gave him my blessings. Why let California hog the reputation for spiritual innovation?

—Kevin Kelly

THE AMERICAN MUSEUM OF NATURAL HISTORY

77th St. Entrance

Tribal Life of N. Pacific America room

This is the room with the totem poles: a place one intensely wants to take one's girlfriend to — it's dark and sexy, and you can almost see the light bend around the wooden turtles. Also there are murals of Indians in what look like togas.

Between a bugeyed owl and a red-white-and-blue fox, on a wooden bench, I sat.

Eyes closed, I felt a *tutelary* essence — the sense of being forced to learn. Children cried and shuffled, as stout women said, "Let's try to keep these lines together." Not much has changed here since 1904 — an era of High Charity — and the charitableness of this charitable institution made me drowsy.

True, I sensed the secreted Truth within the huge muskrats around me, but another force blocked it. Was it the Spirit of Teddy Roosevelt, whose statue's in the lobby, that happy Imperialist who reached The River Of Doubt in Brazil in 1913 and named it after himself?

BLOOMINGDALE'S

1000 3rd Avenue (at 59th St.)

This was only the second time I'd been there. The first time, perhaps because I'd gone with my old acidhead friend, Binks, it seemed like a funhouse: with multitudes of mirrors, and grinning men appearing, anxious to spray you with things. On a landing of the escalator, a man in a dinner jacket played a grand piano, with the word OPIUM propped up on top. "My first subtitled hallucination," I whispered to Binks.

But this time, at 10:40 on a Tuesday morning, it all seemed tired and facile — even the fishnet stockings on the young purse saleswomen. "I don't *like* most of this stuff!" it hit me in the coat section. "It's boring!"

I picked the 5th floor because it had the most chairs and was out of harm's way — and I couldn't bring myself to ascend further.

I was directed to a heavy woman with a gorgeous telephone voice, Sharri Garvin, Customer Service Expert for the furniture dept., to ask permission. She had *The National Star* on her desk ("Hey, Look At Oprah Now!") and agreed easily to my request: "I tell you, people do a

lot of things to our chairs — meditating will probably be one of the calmer ones."

Sitting down, I wondered, "What do people do to Bloomingdale's chairs?"

I closed my eyes.

Salespeople paced by at great speed, with the air of nearing someone on the phone with a lot of money.

"Is Mr. Subotnik on the floor?" came an announcement on the intercom, which reminded me of the famous Frank O'Hara poem :

> and suddenly I see a headline
> LANA TURNER HAS COLLAPSED! . . .
> I have been to lots of parties
> and acted perfectly disgraceful
> but I never actually collapsed
> oh Lana Turner we love you get up

I'd been sprayed twice by cologne agents on floor 2: both Obsession and Ralph Lauren; which was a distraction — or is there a piped-in scent at Bloomies?

"It's 66 inches, which only gives 6 inches to play with," a successful man said to his wife.

The computers were down, and there was some swearing due to that among the nearby sellers. "The thing that gets me is he's just playing with us!" a woman exclaimed, after "shit." Did she mean God?

I had the sense of air streaming by, but not just air — some kind of happy moving molecules.

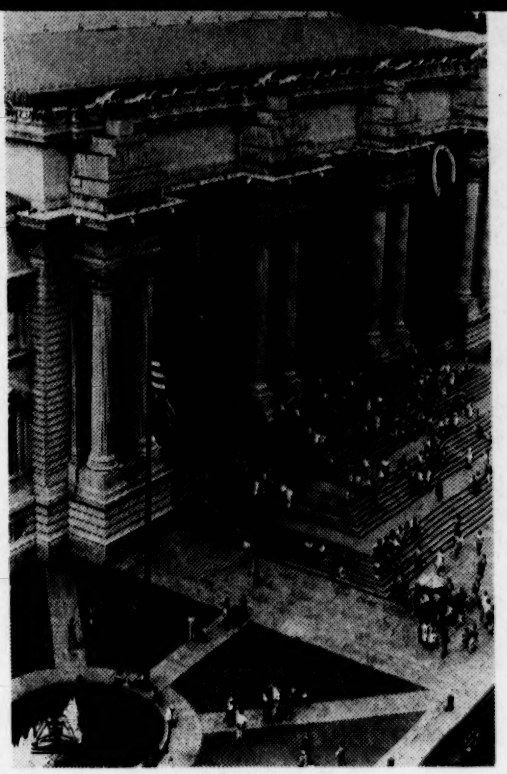
The strength of a store is it's a *receptive* place. Like Lao Tzu says:

> The use of clay in moulding pitchers
> Comes from the hollow of its absence;
> Doors, windows, in a house,
> Are used for their emptiness:
> Thus we are helped by what is not
> To use what is.

The Museum of Natural History wants to explain the Ichthyosaurus, and impress you with its breadth, but Bloomingdale's wants something from you — it wants to rub its little machines over your credit card. A store is an event waiting to happen. Which gives meditation a chance to bloom.

Afterwards, I went to the bathroom — a surprisingly grim place, with a very lengthy wait for the stalls. 5 men were in longer than I have ever waited for 5 men.

Perhaps Bloomingdale's has a constipating effect?



DEGAS EXHIBIT

The Metropolitan Museum of Art
82nd St. and 5th

Did you know Degas visited New Orleans from October 1872 to March 1873 — the home of his mother's family, the Mussons — and made "Portraits in an Office (New Orleans)," a breakthrough picture set in a cotton exchange? (Near it is "Woman Ironing" (1873) — one of those dark workingclass paintings — like early Van Gogh — suggesting *work*, in some sense, makes us *gods*.)

In this room, where Degas began to find his tune, I sat — and though the place was packed with Kept Women From Westchester, the Socially Secure (those on Social Security) and a few scruffy artists, I felt suddenly no one was there; that I was in either a mosque or a bank, and a silver thread from some unseeable height descended to my head — as if I was the simplest kind of marionette.

Of course one *would* feel connected to Heaven and to no person in the Met; it's the one museum in NYC one never plans to pick up women in. (It seems inevitable you wouldn't make it outdoors together — there's too many Babylonian Kings in the way.)

Nowadays, in the Big Exhibits, one is surrounded by voices emerging from people's earphones — as if the little machines they wear magnified their thoughts — the only problem being they all think the same thing.

A few human voices did speak — a Classical Music Announcer type: "It's so good to see this because I never knew their size"; a well-meaning Jewish relative : "*Harriet*, let me take your coat"; and a druggist from Ohio: "We should be through in one hour and five minutes . . ."

By chance, a real guru attended the show while I was there — Brahmananda Sarasvati, leader of the Ananda Ashram in Monroe, N.Y. — a man with quite a long beard and bright orange robery. He seemed to have suffered a stroke, judging from his speech. A woman who looked like a Born Again Christian pushed his wheelchair, and spoke quite loudly to him. (For some reason women with gurus always look like Born Again Christians.)

"Here's a woman in drapery," she said of "Standing Woman, Draped" (c. 1860-62) (graphite, watercolor, gouache).

"I, too, am draped," the guru joked.

BROWNIE POINTS CAFE

101 2nd Ave (at 6th)

Originally I went there because I *knew* somehow, as moochers do, that one can sit many hours and buy very little — perhaps by its large yellow plastic sign, with script letters.

Or by the legend on each table:

FOOD & DRINK
PURCHASED ELSEWHERE
ARE NOT PERMITTED

This day I bought an Almond Ambrosia cookie for $1.20. It had 3 almonds, equally spaced and pointing to the center; the sign of an intelligence — either obsessive or idealistic — in its maker.

Meditating, I was immediately aware, feeling upward with a kind of antennae that comes to one, meditating, that "It's a cave" — or rather *less* large than a cave. Then the *warmth* inside my coat, I realized, was not entirely physical — there was an emanation from my *heart*.

"This is one of the places that's saving NY!" I thought.

It peaked when Barbra Streisand came on the radio singing "There's A Place For Us." Lately I've noticed everyone in NYC thinks there's some other place they *should* be — Violet and I alternate between Senegal and New Mexico — a sense that This Is Not Our Real Home. But that's the greatness of this Apple, that it gives you this yearning. And the way Barbra sings — with that somewhat insincere, but torrential, emotion — is just the way one thinks of that golden place, not California, but with that same sense of hope, and more angels. ►

"What's this 'carob'?" a customer asked, looking at the glass case.

"Well, it's something like chocolate, but if you're expecting chocolate, you'll be disappointed."

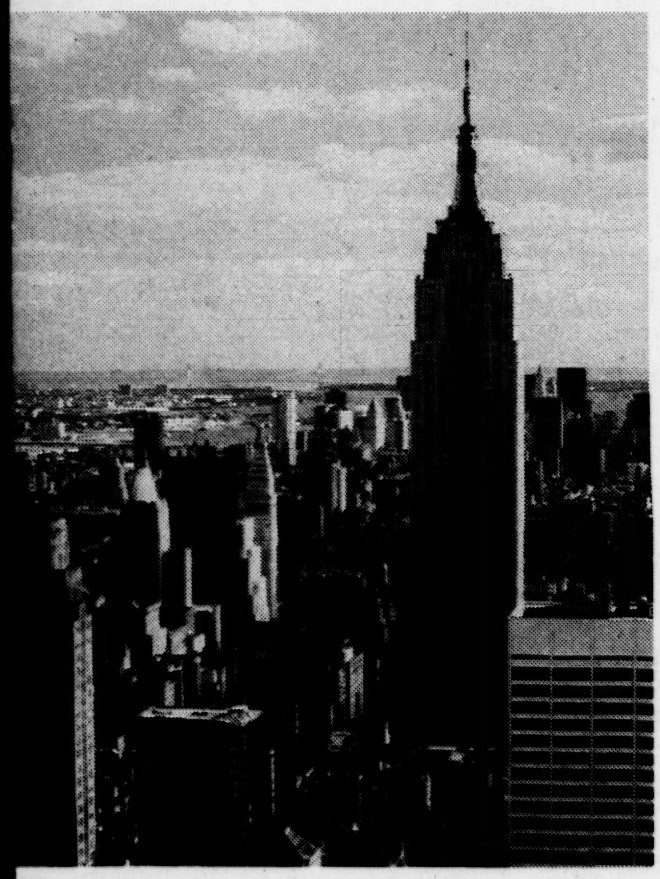
"Oh . . ."

"It's from the . . . what plant's it from?" The owner asked the other guy behind the counter.

"The carob plant."

"The carob plant. We're a wealth of information here."

Then the clock in my pocket started beeping and I went to my therapist.



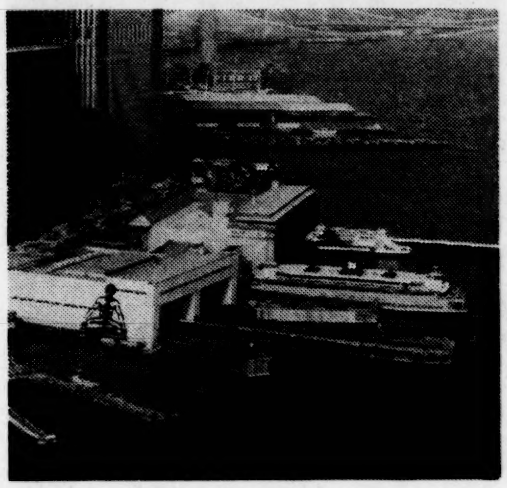
THE EMPIRE STATE BUILDING

(Find it yourself)

It's quite an indelible fact that you walk down 34th St. past the thousand women buying Christmas cards that play "Jingle Bells," past the Ultissima Beauty School, through the revolving doors, and you're *in* the Emp. State Bldg. I love this building, and it amazes me just anybody can walk into it — it should be off on its own island like the Statue of Liberty and take $ to get to.

But where to sit? I rode down the escalator, to the basement, as a sax played "I'm Dreaming Of A White Christmas," piped in.

Then, on a blonde bench near the ticket booth to the Observation Deck, I listened to women gossip in Russian, and felt a *blanket* over me, or perhaps a 102-story building sitting on my head — fell asleep and drooled in my beard.



THE STATEN ISLAND FERRY TERMINAL

South Ferry

Almost, I sat next to a man stooped over a shopping bag, but he had that No Home smell, and fearing I'd not be able to think of anything *else*

coward I am

I climbed over the seat, closed my eyes and felt immediately happy.

"This place is like a birthday cake," I thought — it's got a *round* sensation . . .

The boat came and an arm jostled me. "Maybe he *doesn't* want to catch it. Probably prayin," a guy said.

"That Napoleon Hill has very sound principles," a voice spoke, of the author of *Think And Grow Rich*. " 'Find your dream — and don't stop until you reach it.' "

Marcus Boon told me last Sat., "The nice thing about Midtown is the *tides*," and this room, too — this happy room in which homeless live — is very much one of *tides*. Over 50 minutes it emptied and filled, and the sound of thousands of Staten Islanders standing is like a *wind* over alfalfa.

METROPOLITAN OPERA

Lincoln Center
66th St. and Broadway

I wasn't sure which bldg. I was in; I *suspected* it of being the Opera, because I sensed the woman at the INFORMATION desk — greyhaired, German-accented and *sympatico* — was a volunteer. (For opera, the aged will volunteer.) This was the first time I had my letter from Kevin Kelly, editor of this journal, which I produced for her:

January 2, 1989

To Whom It May Concern,

The bearer, Sparrow by name, is working on an article for our magazine. Please allow him to meditate in your establishment. His research is for a "Spiritual Guide to New York City." Thank you for your assistance.

Sincerely,
K.K.

She looked at it wonderingly, as if she'd read Hesse in youth, stammered that the "chamber" was closed — and directed me to the security guard, who examined the note at greater length and pointed to a corner: "You may medeetate there."

Was he Italian? Were all the Cultivated Races drawn to this Center, to aid spiritual reporters?

Closing my eyes — by the glass window of the gift shop — I felt a wobbly thrumming giant *harp* within the building, making the sound of a bell before it rings. (And I hate opera.•)

It's the *hollowness* here I love (the hollowness of auditoria), I thought. Perhaps a great civilization builds great hollownesses. Certainly this was true of the *Turks*.

"Do I Hear A Waltz?" played in my mind as I looked up.

• OK, I like one French one, about a girl who works in a cigarette factory.

THE PORT AUTHORITY BUS TERMINAL

42nd Street and 8th Ave

There were 3 guys camped out by the escalator as I came in.

"You want some potato chips?" I asked. The guy on the right took them before I'd finished the sentence.

Upstairs I saw they'd removed the seats, to discourage drifters, so the drifters were sitting on the floor. I sat down near a pair of crutches and closed my eyes.

"Is it *possible* to meditate with muzak?" I thought, and for 30 minutes the muzak continued — all songs I'd never heard of. They seemed to have been sung by Loretta Young in musicals of the 1950s. I knew the last one, though: "You Needed Me," the Ann Murray song:

> You placed me high
> up on a pedestal
> So high that I could almost see eternity

"This feels like a Woolworth's in Selma,

Ala," I realized. It doesn't have a NYC sensation — possibly because it's a portal away from the City.

I felt at one point that everything was bent, or leaning to one side — perhaps the left.

But most of the time, I thought "This is exactly like *not* meditating."

THE NEW YORK STOCK EXCHANGE

Wall & Broad Sts.

"Miss, would you step out please?" the security guard asked.

"Ask her if she has a knife," the check-in woman, who was dressed for a Presbyterian picnic, suggested.

"It must be my jewelry," the offending woman mused.

"Will you take your bangles off?"

"Sure."

She passed through the bomb detector.

"Yeah, that did it," the guard noted.

"Cameras are going to be checked in!" he shouted at the new arrivals.

Finally, my curiosity overcame me.

—Why aren't cameras allowed? I asked.

—Because the flashes distract the brokers.

"You have probably seen the stock tables in your local newspaper . . ." a female voice began over New Age music. Bronze bull and bear bookends were $125 at the gift shop, I noticed. I walked out to the observation booth. Eyes closed, there was a sea-like surge — "Ah, this will be a good place to meditate" — a push against my forehead.

Then it gave me a headache.

And the voices from the floor sounded pained. There were shouts, as in a delirious fever —

More New Age music came on, and "What you are watching is the marketplace in action . . ." a Friendly Pharmacist voice stated — then an explanation I heard 15 times and still don't understand. ("If you look closely at the front of one of the trading posts you will see a discussion between a Specialist and a person employed by the broker . . .")

This tape is a ploy to get people moving, I realized. At the end it suggests: "If you've heard this tape, please remove yourself so others may have a chance to see," plus a woman with a microphone repeats it, *live*. But the Stock Exchange is a paper tiger, reader. You can meditate as long as you like — or can stand.

Opening my eyes, I met a sociology student in a tie, taking notes. "There's more camaraderie than you would expect," he said. "I saw a guy giving a woman a massage. I wished I was down there."

"Who cleans the floor?" asked a Queens woman as I left.

PYRAMID CLUB

101 Ave A

Being here makes you love rocknroll. I have sworn off rocknroll a hundred times in my life — most recently an interview with Paul Morrissey, my favorite living director (*Trash, Heat, Spike Of Bensonhurst*) suggesting this music is leaving us prey to Soviet attack — made me think "I should try to listen to Tchaikovsky," which bores me to death absolutely.

But I compromise by playing songs of the Sami (Laplanders of Norway).

Now, though, hearing *Rank* (The Smiths' live album), I'm in a state of absolute grim delight:

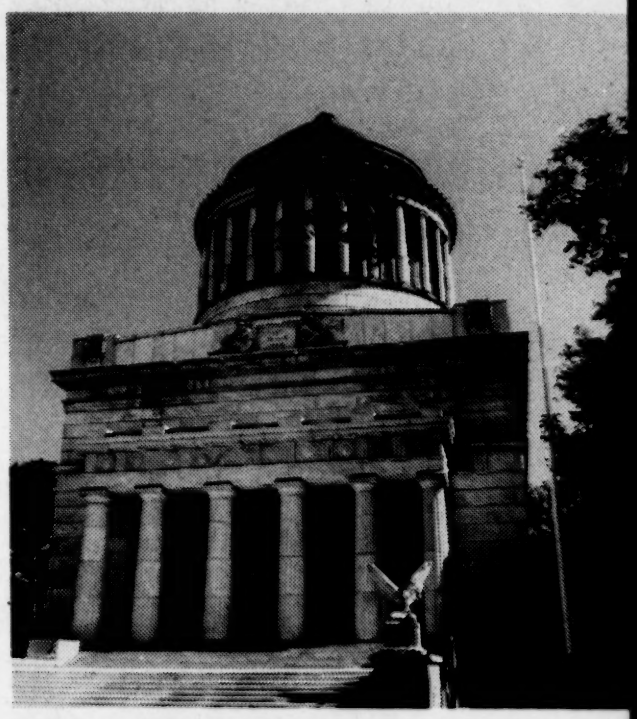
> And if a 10 ton truck
> Crashes into us
> To die by *your* side
> Would be a heavenly way to die

"Oh, yes, it's supposed to be good to meditate in a pyramid," I thought — and remembered I'd meditated inside the Great Pyramid in Egypt. This was much better; Cheops appeared to have had a spiritual *lobotomy*.

Here, I sensed the familial warmth of beer and cigarettes — and I never drink beer *or* cigarettes — and a flight of stairs . . . no, a *tunnel*, leading down into Mysteries.

But I don't know the Pyramid's core — perhaps no one can. 5 years ago (1983) it looked like the club was going yuppie. It had the most heterogenous Good Dancers in NYC — Office Managers, junkies, hairdressing students — but yuppies, after flirting with the thought of taking it over, decided they'd rather eat dinner — so it's stayed ready-for-a-fight. If you can read lips, you'll hear good lyrics you'll remember at least one line of, as I do with the Athens (Ga.) band, *Oh, OK*, concerning hairstyle:

> It's a permanent
> It won't last forever



GRANT'S TOMB

122nd St. and Riverside Drive

"How large it is," I thought. "Grant didn't do too bad."

Should I take off my hat? Thinking of Grant, the first Pres. famous for corruption yet so honest he became penniless and was forced to write his memoirs, which were the best of any Chief Executive, I went downstairs.

2 lurking caskets of stone held Grant and wife. "By a bust of Sherman I'll sit." (Up on a ledge — there are no seats.)

Luckily, the guards flirt and drink coffee all day, so they didn't chase me. And the white marble *warms* slightly to the ass after a while.

The place is the shape of a German WW1 helmet — round with a tip — and the roundness holds a good silence; but the *tip* collects ideas and keeps them from moving freely. I thought at times I could feel the heavy sensation of a man who lived behind a *beard* his whole life,

and drank, and told many thousands to die, and had to be *President*, but it may've just been me.

Finishing my *guru puja*, I looked at Sherman. He seemed angry and vexed — because he's in *real* hell now and finds that war was not so bad?

I met a black actor upstairs, and we conversed.

—Grant's quite photogenic, he said.

—I wonder what he'd look like without his beard.

—There's something in there. He shaved so his wife could have his picture taken.

I looked in the room he pointed to — and there was Grant with the center of his beard removed. He was utterly unrecognizable. This man we all think we know — we don't know him, we know his beard.

THE UNITED NATIONS

46th St. and First Avenue

On the plaza you pass a sculpture of a gun with its barrel tied in a knot: "Gift of Luxembourg 1988."

Well, Luxembourg *would* be against war.

And the great neon Pepsi Cola sign across the river. ("Isn't there a committee to preserve the sign as part of our national heritage?")

Thru the metal detector I went.

—Is it possible to use the meditation room? I asked an INFORMATION woman resembling Mary Tyler Moore.

—No, it's indefinitely closed.

—Why is that?

—Not enough security.

An ironic answer, I thought.

On my way to the MEN/MESSIEURS room I passed a paper ball for 50 cents.

—Where are these from?

"Tokyo," an old woman with a sari said tenderly.

It's like Startrek here, I thought — so international.

Beside a moon rock (from Apollo 14) in the lobby, I saw myself rise into the air, grinning, behind a desk — like in *Son Of Flubber*.

("Oh, I forgot to look for that rug — the Persian carpet that so impressed me in 5th grade — when the guide told our class, 'There is one mistake here, deliberately, because Muslims believe only God is perfect.'"

I wish I'd spent my life looking for that mistake.)

APOLLO MEDICAL OFFICE

379 W. 125th St. (Harlem)

Walking 125th St., I pondered where to meditate.

Rogers Variety Candy Gum (409) looked good — full of old men sitting at tables or standing with canes. I knocked at the door.

"What do you want?" the man nearest the door asked.

"I want to buy a soda."

—No no no he said, closing the door.

So when I peered in this "medical office," past a puddle on the floor, to see a narrow hall with 4 broken seats, I walked in.

A blonde woman and a black man were talking like they just woke up.

—Are you waiting for the Dr.?, a third patient asked me.

—No, I just want to . . . hang out.

—Sit down and be cool, he suggested.

I did. Lots of people came in, trying to give blood or use the toilet, but the toilet was broken ("Can I use your bathroom?"/ "It will be fixed on Monday."/"Can I pee in your sink?") And when no one was there, the medical personnel — all Indians — argued in English. Eyes closed, I felt someone right in front of me staring, hard. Or a bomb about to ignite.

"Excuse me." A hand touched my shoulder. I looked up to see a green sweater with WALKDON CRICKET CLUB on it.

"Can I help you? Are you waiting for the Dr.?"

I showed him my letter.

He looked at it a long time.

"You have to bring this to Social Security, before you come here," he said.

CAVE, FT. TRYON PARK

(near Bway and 193rd St. entrance)

The Navajos believe your soul stays in the land where you were born. "My soul is here," I felt, leaving the subway at 190th St. (I grew up in the Dyckman Projects, 6 blocks off.) Still I was terrified of my cave, where Mitchell Kleinrock and I first smoked pot, and found bags of glue, all stiff, from neighborhood sniffers, inside.

Is it gone? I worried, then remembered rocks don't move.

I climbed the hill, 50 yards.

Hello?, I called into the crevice, standing over an old man's hat. No answer.

Inside was a carpet — I *forgot* the carpet! I sat on it damply, first laying down *The NY Times*. (It *had* to be the *NY Times* — the way Don Juan tells Castenada, "It must be a branch of mesquite.") A shaft of sunlight fell from a chink. *Plants* are growing in my cave!

I heard dripping water, closed my eyes and thought, "I'm the Prodigal Son," because the cave seemed to be saying, "You can always return."

"The peace that passeth understanding" came to me.

Then I left, afraid someone would knife me.

Outside: "I did it! I finished this article!"

A cop was on the roof of my cave. "Don't worry, I'm not looking for you. There's a policeman missing."

"He's not in that cave," I volunteered.

"What's in there?"

"Just a carpet."

The cop continued down, a youngfaced cop, looking worried and trying not to.

I'll read the papers tomorrow, I thought. ■

Sudden Fiction

*If you like reading the book and magazine excerpts here in **WER**, you'll probably like short-short stories. This book has 70 stories by as many different American authors, mostly contemporary, with a few classics.*

I really like short-short stories, though I worried that they were in some way the literary equivalent of MTV. After reading this book, though, I agree with Grace Paley's observation that the effect of this genre is in fact just the opposite of something like MTV:

"A short story is closer to the poem than to the novel (I've said that a million times) and when it's very very short — 1, 2, 2½ pages — should be read like a poem. That is slowly. People who like to skip can't skip in a 3-page story."

—Keith Jordan

•

[From the afterword]

Paul Theroux

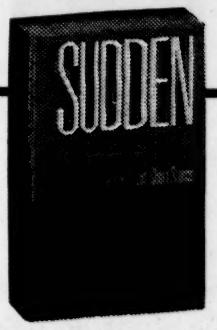
It is prose fiction of a certain length — about four pages, I guess. It should not be mistaken for an anecdote; it is highly calculated — its effects, its timing. In most cases it contains a novel.

Charles Baxter

In the abruptly short-short story, familiar material takes the place of detail. Oh yes, the reader says: a couple quarreling in a sidewalk restaurant, a nine-year-old boy stealing a Scripto in Woolworth's, a woman crying in the bathtub. We've seen that before. We know where we are. Don't give us details; we don't need them. What we need is surprise, a quick turning of the wrist toward texture, or wisdom, something suddenly broken or quickly repaired. Yes, we know these people. Now just tell us what they do.

A small cast of familiar characters, non-exotic locations, pet themes: to work these materials in a short space is to balance one's own virtuosity as a writer against the reader's ability to anticipate. The tune is usually thin, played on one instrument, and lasts anywhere from thirty seconds to about four minutes. Like Debussy's "Syrinx" (two minutes, thirty-eight seconds), its intervals are unexpected and must continue to resonate when the piece is over. It's a test of the reader's ability to fly, using minimal materials.

Why these things, now? Well, who is notable for making plans anymore? Who feels like the hero of an epic? These are tunes for the end of time, for those in an information age who are sick of data. The future has narrowed, become so small that no one feels like crawling into it. It's not that people don't have attention spans. They just don't believe in the future, and they're tired of information. Ask the kids: anything worth doing isn't worth doing for long.



Sudden Fiction
(American Short-Short Stories)
Robert Shapard and James Thomas, Editors. 1986; 264 pp.

$10.95 ($12.95 postpaid) from Gibbs Smith, Publishers, P. O. Box 667/Dept. WE, Layton, UT, 84041; 801/544-9800 (or Whole Earth Access).

Success with the Gentle Art of Verbal Self-Defense

Every argument I have ever had is in this book. Dr. Elgin is a linguist, now retired, who identifies certain language behaviors as verbal abuse, and sets out ways of recognizing and avoiding them.

"Everybody UNDERSTANDS why you can't get along with other people!"

"A person who REALLY wanted to save money would spend it CAREfully."

"If you REALLY loved me, you wouldn't want to leave."

"Don't you even CARE about your weight?"

Sound familiar? Get you riled up?

I've "won" arguments using those attacks. Elgin takes them apart with a linguist's tools, from grammatical analysis to slow-motion photography. Native speakers of English use certain word orders, carefully placed emphasis and intonation, and body language when trying to hurt one another's feelings. Elgin teaches how to recognize an attack, and how to turn the attack aside or, perhaps, make it back into a useful conversation.

*Dr. Elgin has produced books, workbooks, and audio- and videotape programs. The paperback **Success with the Gentle Art** is a solid introduction. If you are working with a business group, or a social group where acrimony seems to be the common social behavior, get the cassette tape program **Mastering the Gentle Art** as well. Several speakers illustrate how arguments flare up in conversations, and Dr. Elgin illustrates how to deal with them without throwing fuel into the flames.*

—Hank Roberts

•

The bait itself is trivial to verbal abusers, valued only for its potential to provoke you.

They do not really care about your lateness to work or your smoking or your weight or your extravagance or the effect your actions may have on your parents, or whatever else they dangle in front of you as a lure. . . . They have no interest in your answers to their questions, or your replies to their challenges. They care about holding your attention; they care about tying you up for fifteen minutes or more in the scenario they have planned for you. They care about demonstrating that they have *power* over you and can control your behavior.

Therefore: ANY TIME YOU TAKE THE BAIT IN A VERBAL ATTACK AND PARTICIPATE IN THE VERBAL VIOLENCE LOOP, YOU *ARE* LETTING THEM GET AWAY WITH IT. That fact — not the irrelevant statement that you found so insulting or hurtful — should be your concern.

•

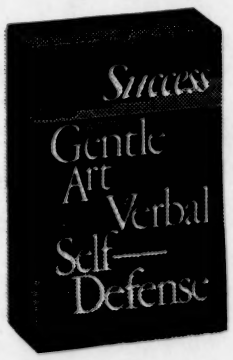
Here's an example:

"If you REALLY loved me, YOU wouldn't waste MONEY the way you do!"

The bait is the part about wasting money; that is what the attacker expects you to respond to. You are expected to take the bait and say, "What do you MEAN, I waste money! I DO NOT!" And then you are off to a flaming row — not a good way to handle the situation.

The important part of the attack is not the bait, but the presupposition at the beginning — "YOU DON'T REALLY LOVE ME." Instead of taking the bait, respond directly to that presupposed attack.

Say "When did you start thinking that I don't really love you?" or "Of *course* I love you!" This is not what the attacker expects, and it will short-circuit the confrontation.



Success with the Gentle Art of Verbal Self-Defense
Suzette Haden Elgin, 1989; 287 pp.

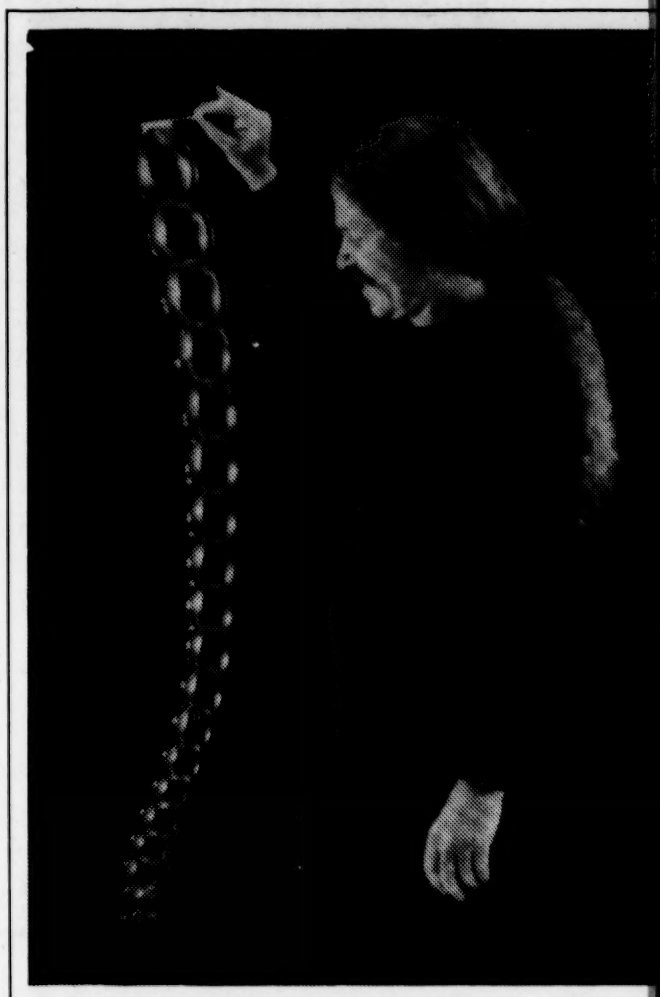
$12.95 postpaid;

Mastering the Gentle Art of Verbal Self-Defense
Cassette tape program

$69.95 postpaid

Both from Prentice Hall/attn.: mail order sales, 200 Old Tappan Road, Old Tappan, NJ 07675; 201/767-5937 (or Whole Earth Access).

SCIENCE TOYS *BY JEANNE CARSTENSEN*



WHAT SCIENCE TOYS does a physicist like best? Would you believe rubber balls, whirlies and bubble hoops?

I was surprised to learn that these were some of the favorites of Dr. Paul Doherty, physicist from the Exploratorium in San Francisco. As he frantically whirled and bounced his favorite toys he explained to me that he likes simple toys with a lot of depth for teaching science.

These are inexpensive toys (except for the complex marble roller coaster, Spacewarp), fun just to play with, and educational, too, if you take the time to think about (or teach) the principles that make them go. □

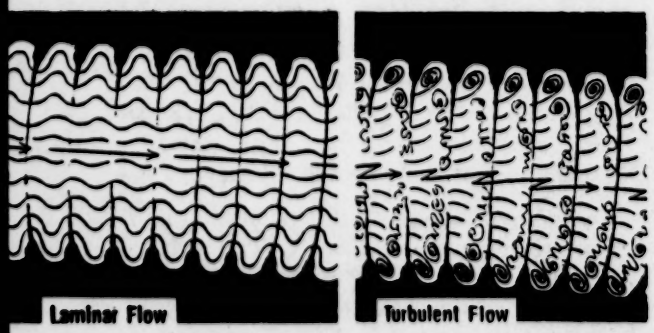
Rebound Balls

The Exploratorium sells a package of two black rubber balls, one made out of the common rubber Neoprene, and one made out of a special rubber called Norbornene polymer. Although they look and feel the same, when you drop them together from the same height, one bounces and one lands with a thud — no bouncing.

Well, so what? If you read the package you'll learn about the "coeffecient of restitution." The bouncy ball has a high coeffecient of restitution and the bounceless ball a low one. Basically, bounce comes from the rubber's ability to quickly return to a spherical shape after it hits the ground, thus propelling itself back into the air. The bounceless ball returns to its original shape very slowly, so instead of bouncing it converts most of its energy into heat.

Bouncing (or not bouncing) these balls is fun. People laugh when the Norbornene rubber ball doesn't bounce at all. It's uncanny, like seeing a pig run backwards. It turns out the stuff has lots of uses, though — like car bumpers and running shoes.

Rebound: $7.75 postpaid from The Exploratorium Store, 3601 Lyon Street, San Francisco, CA 94123; 415/561-0393.



Whirly

A whirly is a plastic tube with ridges that you whirl around in the air until it sings. Every whirly has a fundamental note, like "A," depending on its length. As you spin the whirly faster and faster it jumps up through a harmonic scale. A typical whirly can sing five or six different notes (if your wrist and arm don't give out when trying to whirl fast enough to hit the high notes!).

People of all ages and musical persuasions seem to delight in whirling whirlies. The Australian composer Sarah Hopkins uses the whirly as a solo and ensemble instrument (she turned Exploratorium staffers into whirly fanatics during her tenure as artist-in-residence there). Kids love them (they come in suitably bright colors and are just plain fun to whirl). A friend of mine even used a whirly to create the sound of an approaching swarm of bees for a funny message on her answering machine.

As for science, why does the whirly sing? The air passing through the whirly gets turbulent because of the ridges; the oscillating air creates the sounds. A nifty explanation sheet available from the Exploratorium diagrams this process as well as the harmonics of the air wave passing through the tube that creates the notes.

Whirly: $1.50 (approx.), widely available in toy stores; **$4.88** postpaid (includes whirly physics sheet) from The Exploratorium Store, 3601 Lyon Street, San Francisco, CA 94123; 415/561-0393.

Bubble Hoop

We're talking big *bubbles, too. When I first saw the hoop that comes with this kit I thought it was a hoop for circus poodles to jump through. But the 15-inch stainless steel hoop makes huge swooping bubbles when dipped into a soapy solution (recipe included) in the heavy-duty dipping tray. At a preschool fair in Glen Park in San Francisco recently, toddlers were constantly clustered around a similar bubble-making setup. Parents had to get the kids started, but they were soon able to make bubbles as big as themselves without any help. I noticed lots of adults without children making bubbles as well (myself included).*

If you want to do more than just daydream as the iridescent bubbles shimmer in the sunlight, you can always contemplate surface tension. Water molecules tend to stick together, which makes the molecules on water's surface behave like skin. That means water is no good for bubble-blowing without soap. You add soap to decrease the water's surface tension so the water can spread out into a bubble. The iridescent rainbow colors of bubbles are caused by the mixing of the sunlight reflecting off the front and back surface of the soap film. The Bubblology fact sheet included with this kit explains these and other basics of bubble physics in easy-to-understand language.

Bubble Hoop (1 hoop set): **$24** postpaid; **Bubble Hoops** (2 hoop set): **$33.50** postpaid; both from The Exploratorium Store, 3601 Lyon Street, San Francisco, CA 94123; 415/561-0393.

Bubble Magic

Internationally known bubble expert (yes, he's blown bubbles in science museums, street fairs, and physics classrooms around the world) Tom Noddy has written this book to gain converts to bubblemania. Learn how to make a Caterpillar Bubble, a Bubble-Within-A-Bubble, The Love Bubble (two bubbles made into one), and many more. Also learn how it all works and how to have fun doing it. The book comes with wand and bubble juice. It's destined to become a bathside classic.

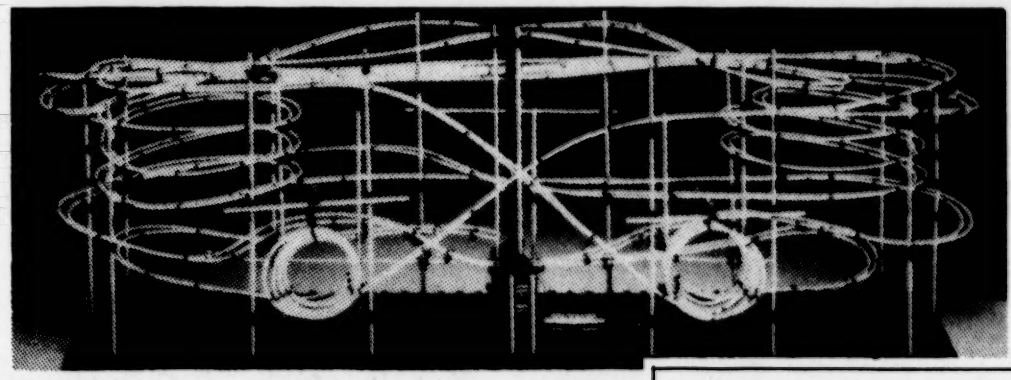
Tom Noddy's Bubble Magic (with Bubbles): Tom Noddy, 1988; 96 pp. **$ 11.45** postpaid from Running Press, 125 South 22nd Street, Philadelphia, PA 19103; 800/428-1111.

Spacewarp

Spacewarp looks like a roller coaster for metal balls. A little motor takes the balls to the top, but from there they rely on gravity and precise construction to make it down the complex track of straightaways, hairpin curves, and loops without getting stuck or falling off. You build it all yourself out of metal poles, rubber rails, and plastic joints. The directions show plans for several layouts but after you get the hang of it you can construct your own designs as well. Success depends on understanding how potential energy (height) is converted into kinetic energy (movement) to move the balls with just the right amount of momentum needed to swirl, twirl, and roll them to the bottom.

Spacewarp is the most complex of the toys reviewed here. They can't keep it on hands-on display in The Exploratorium Store because just a jiggle can throw the delicate balance off. But it rewards the patience required to assemble it, and teaches precision. The bigger the Spacewarp Set number, the harder it is (Spacewarp Set 40 takes a lot more work than Set 10, for instance). Parental assistance is probably needed for kids of ages under 12. They also make a Black Wolf model that's even harder. For fanatics, I'd say.

Spacewarp: $25-$80 (approx.). Available from The Sears Catalog (ask for Black Wolf Coaster or Spacewarp Beginner Coaster: 800/366-3000).



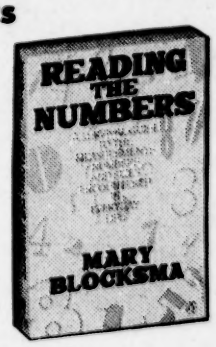
Reading the Numbers

The subtitle to this super-useful reference book is "A survival guide to the measurements, numbers and sizes encountered in everyday life." You can find out if 90 decibels is dangerous; what Grade A Poultry means; if you should seek shelter in a Beaufort Scale 11 wind (yes!); what Therms are on your gas bill. What is the consumer price index, what do the numbers on a ten-dollar bill mean? (besides the 10, dummy.) How is a 2H pencil different from an HB? You get the idea. My advice? Buy this book before some fool takes it out of print. —J. Baldwin

Reading the Numbers

Mary Blocksma, 1989; 224 pp.

$7.95 ($9.45 postpaid) from Viking Penguin/cash sales, 120 Woodbine Street, Bergenfield, NJ 07621-0120; 201/387-0600 (or Whole Earth Access).



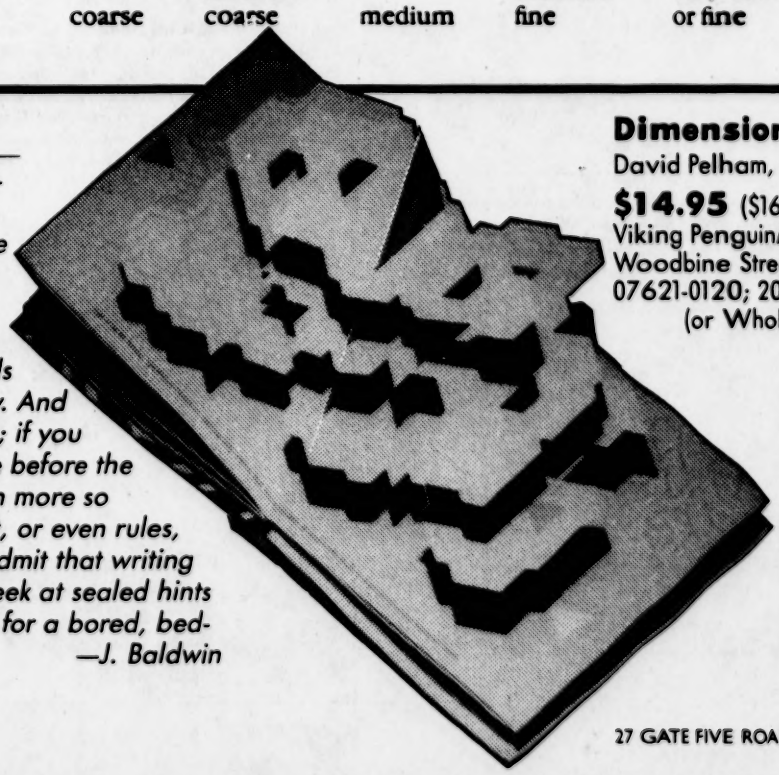
Writing pencil		Art pencil
1	=	3B
2	=	B
2.5	=	F
3	=	2H
4	=	3H

STEEL WOOL SIZES

#3	#2	#1	#0	#00 or #2/0	#000 or #3/0	#0000 or #4/0
coarse	medium coarse	medium	fine or medium fine	very fine or fine	extra fine	finest

Dimensional Mazes

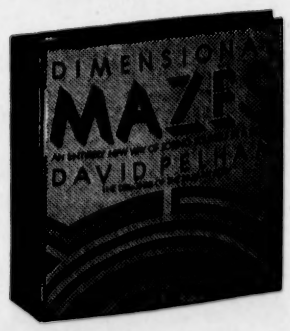
We know about those what-path-does-Bunny-take-to-the-carrot kiddie maze puzzles, don't we? So howcome a mere six of them cost fifteen bucks, as they do in this skinny book-shaped thing? Because, first, these puzzles are three-dimensional, arrayed on pop-up panels of considerable complexity and beauty. And second, these mazes are the real thing; if you were walking through 'em you'd starve before the end. Tricky, infuriating, and made even more so by presentation without clue, comment, or even rules, they'll keep you at it for a while. (I'll admit that writing this review took hours.) Wimps may peek at sealed hints at the back of the book. Just the thing for a bored, bedridden, patient patient. —J. Baldwin

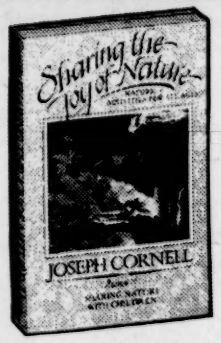


Dimensional Mazes

David Pelham, 1989.

$14.95 ($16.45 postpaid) from Viking Penguin/cash sales, 120 Woodbine Street, Bergenfield, NJ 07621-0120; 201/387-0600 (or Whole Earth Access).





Sharing the Joy of Nature
Joseph Cornell, 1989; 167 pp.
$9.95
($11.95 postpaid) from Dawn Publications, 14618 Tyler Foote Road, Nevada City, CA 95959; 916/292-3482 (or Whole Earth Access).

Sharing the Joy of Nature

Author Joseph Cornell's first book, ***Sharing Nature With Children*** *(**EWEC** p. 386) has become justly famous because it works; both kids and teachers have been happy to transcend the usual stultifying "nature walk." Now Mr. Cornell has added the depth and detail necessary to enthrall adults (the kids can come too, of course). The teaching method is a logical sequence he calls "flow learning": Awaken enthusiasm, Focus attention, Direct experience, Share inspiration. As both a giver and receiver of nature expeditions, I can vouch that it's an effective and up-beat way to get at things without being sappy.*
—J. Baldwin

•

Camera is one of the most powerful and enjoyable activities in this book. In a simple and natural way, it quiets distracting thoughts and restlessness and frees the attention for absorbing nature with unobstructed clarity.

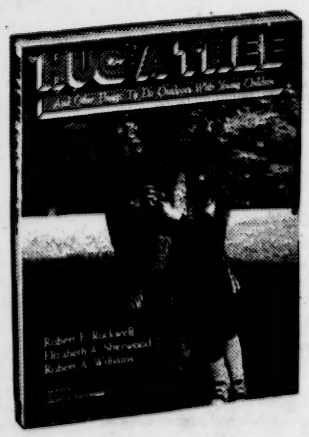
One player takes the role of photographer, and the other plays the camera. The photographer guides the camera, who keeps his eyes closed, on a search for beautiful and interesting pictures. When the photographer sees something he likes, he points the camera's lens (eyes) at it, framing the object he wants to "shoot." Then he presses the shutter button to open the lens. . . .

Encourage the photographers to be creative in choosing and framing pictures. Tell them, "You can make stunning photographs by taking shots from unusual angles and perspectives. For example, you can both lie down under a tree and take your picture looking upward, or you can put your camera very close to a tree's bark or leaves. Try looking down into a flower, or panning the horizon. Be open to the opportunities of the moment." . . .

Because the Camera Game uses nature experiences instead of verbal explanations, very young children can participate just as fully as adults. It's very touching to watch five-year-olds guide their parents or grandparents, taking pictures and sharing their delight in natural things.

Hug a Tree

A workbook of more than fifty outdoor learning experiences for children in groups and individually. Especially good are the suggestions for aiding kids in recording the experiences in their own terms and for following up over time on the original activities. —Keith Jordan



Hug a Tree
Robert E. Rockwell, Elizabeth A. Sherwood, and Robert A. Williams
1983; 106 pp.
$8.95 ($10.45 postpaid) from Gryphon House, Inc., 3706 Otis Street, Mount Ranier, MD 20712; 800/638-0928 (or Whole Earth Access).

3 & UP

BURY THE SOCK

We often hear that litter isn't biodegradable. Does this mean anything to a young child? Probably not. To an adult, it means that most litter does not break down biologically. What the child needs to know is that litter doesn't rot or decay very easily; it just stays where we leave it. In this activity the children discover what happens to cast-offs from people and from nature.

Things You Can Use

nylon sock
leaves
plants
grass
tin cans
glass
plastic
tissue
cellophane wrapper
gum
apple core
fast food containers

Words You Can Use

collect
litter
bury
change
time

What To Do

1. Take a nylon sock and collect both natural materials and litter that you find in the yard. Try to get at least one each of the items listed in "Things You Can Use."
2. Make a record of your collecting by sketching the sock and its content.
3. Bury the sock so that it is completely covered by dirt.
4. Dig up the sock in a few months.
5. Compare what has happened to the organic materials with what has happened to the glass, plastic and metal. Talk about it. You can even moralize a little if you like. The idea that trash dropped on the ground doesn't just disappear is important—even for young children. Attitudes toward the world form easily. They ought to be good ones!

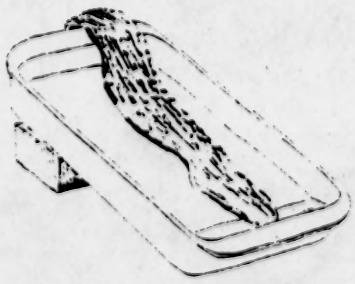
Want To Do More?

Keep the sock in the ground for one year. Repeat the procedure outlined and discuss changes.

Collecting seeds and nuts is a natural activity in the fall. However, a collector often overlooks many seeds because they are small or hard to recognize. An entertaining way to collect some hard to find seeds is to take a sock walk. Previously unnoticed seeds will be easily collected and as a bonus, one method of seed dispersal will become very obvious.

What To Do

1. Dress each child in a thigh high pair of socks.
2. Go for a walk through a densely vegetated area. An empty lot overgrown with weeds would be excellent.
3. Return to home or class and look at the socks! Then take them off.
4. Wet the entire sock, and place it in a cake pan placed on a slant. (see illustration) Fill the lower portion of the pan with water so that the sock remains wet.
5. Put the pan in a warm place and watch the seeds sprout.



How to Shit in the Woods

We all know about the fabled bear. And we also know that sooner or later, we will shit in the woods too. (Sooner is usually better, by the way). Here's how to do it without compromising nature or yourself. —*J. Baldwin*

•

In the snow, a plastic bag is easy to use. Just scoop out a small, deep hole in the snow and line it with the plastic bag. Then sit down. If it's too cold, carefully rest your buns upon your gloves. A plastic bag can also be your chamber pot inside a tent; this will be a breeze. . . .

Unlike a plastic bag, a milk carton will stand up on its own. It becomes the better container when you lack snow to support a bag. First you squat and do what you must; then with your trowel or shovel, scrape up a bit of snow or dirt to go with the load and toss it into the carton. The other advantage is the added sturdiness of the carton inside your backpack. Be sure to duct tape the lid tightly closed between uses. The milk carton is also easier to handle back at the trailhead where it must part ways with its contents.

•

Two more cautions. Don't bury [toilet paper]. Don't burn it. Burning has been the accepted practice for some years, but the thinking on this is now changing. No matter how careful you think you may be, one accidental forest fire is one too many. Use as little paper, therefore, as you can manage and then *pack it all out.*

•

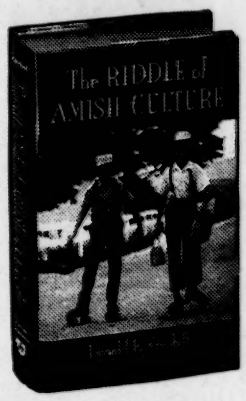
I should mention that it is possible to master a stand-up peeing technique if clothed in a pair of loose-fitting shorts — by sliding the crotch material to one side. One friend does this and then squats; but another woman I know can adjust the material and stand right along a roadside to pee. If, in driving by, you miss seeing her stream, you might guess she was only stretching her legs and soaking up the view. Practice is the secret, they say.

How to Shit in the Woods
Kathleen Meyer, 1989; 77 pp.
$5.95 ($7.45 postpaid) from 10-Speed Press, P. O. Box 7123, Berkeley, CA 94707; 415/845-8414 (or Whole Earth Access).

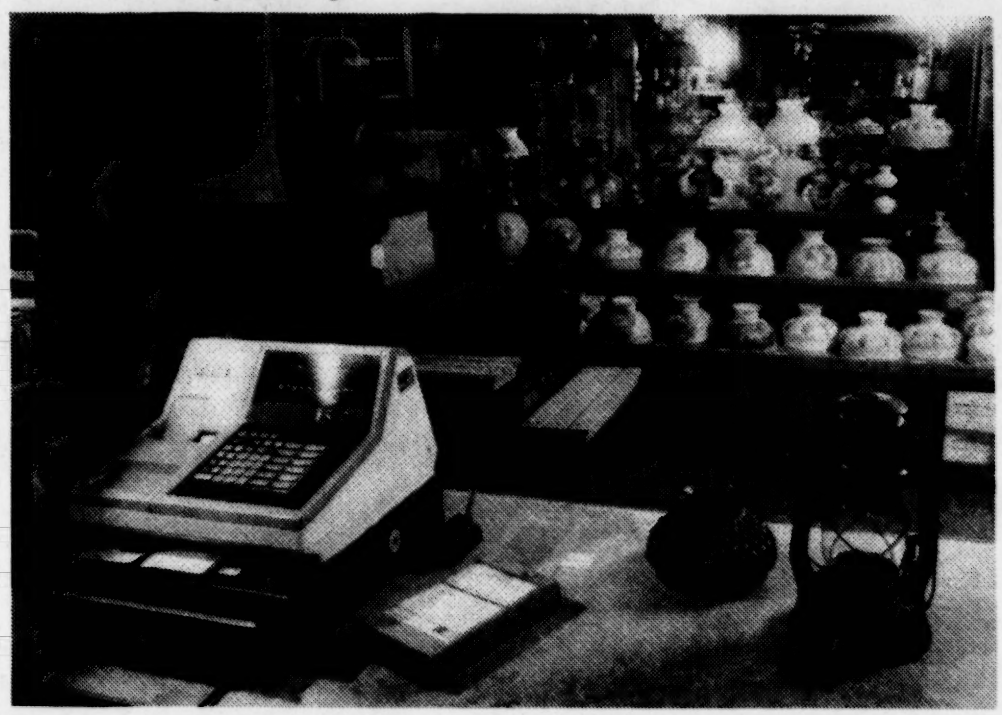
The Riddle of Amish Culture

The riddle of Amish culture in America is: how does it continue to dramatically prosper while unilaterally resisting the very core of mainstream American prosperity — technology? The surprising answer — adaptation and compromise — is given in loving detail in this great book. —*Kevin Kelly*

The Riddle of Amish Culture
Donald B. Kraybill
1989; 304 pp.
$8.95
($10.95 postpaid) from Johns Hopkins University Press, 701 W. 40th Street/ Suite 275, Baltimore, MD 21211; 301/338-6956 (or Whole Earth Access).



An electronic cash register in an Amish retail store illuminated by lantern light.

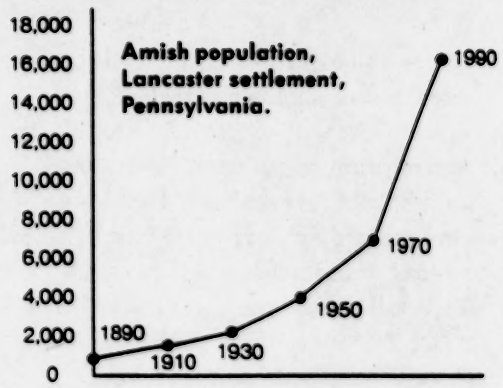


•

The Amish think modern children are spoiled by being driven from club to club and lesson to lesson in hopes that they will find and express their true selves. In contrast, Amish children are washing dishes by hand, feeding cows, hauling manure, pulling weeds, and mowing lawns. They are learning to lose their selves, to yield to the larger purposes of family and community. JOY, a widely used school motto, reminds children that Jesus is first, you are last, and others are in between.

•

Today most Amish families have access to a freezer. Many rent small storage freezers located in fruit markets or stores. Other families, including those of ministers, own freezers located in a non-Amish neighbor's garage or basement. The Amish family makes a contribution to the electrical costs or often barters services or garden produce in exchange for the neighbor's hospitality. The riddle of keeping freezers at nearby non-Amish homes appears hypocritical to the outsider. Rather than two-faced deviance, freezer use is but another compromise. It permits the use of a modern appliance that helps preserve food, which in turn supports the extended family system. At the same time, this arrangement bars other electrical gadgets from Amish homes. Use of the freezer undergirds the Amish commitment to large families



and self-sufficiency. Freezing homegrown foods assures a permanent place for the garden and its wholesome work.

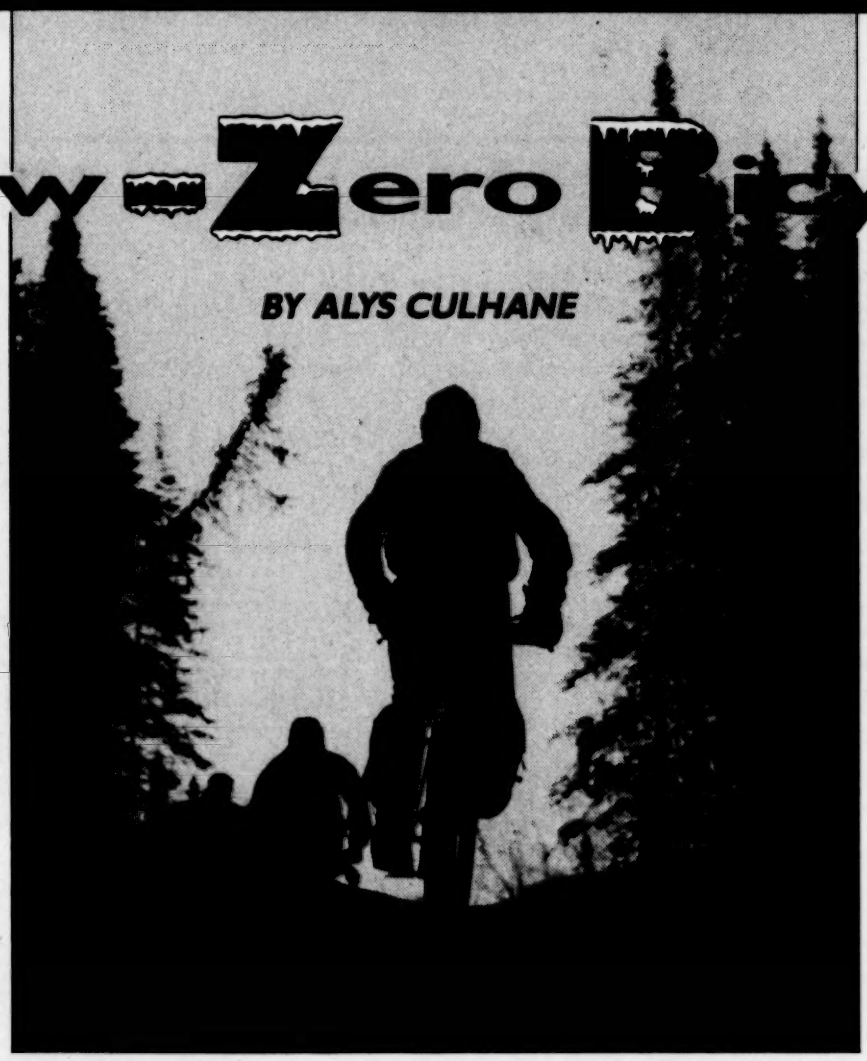
•

The Amish have been willing to negotiate. They have made numerous technological concessions that have reaped handsome financial benefits. While holding firm to some taboos, they have not allowed religious practices to erode the economic base of their community. Their flexibility has energized the fiscal and cultural vitality of their community.

Despite their flexibility, the Amish have insisted on the supremacy of the group over that of the individual. Excessive individualism, which threatens to splinter the collective order, is simply not tolerated. In both childhood and adulthood, the individual remains subordinate and submissive to community discipline.

Below-Zero Bicycling

BY ALYS CULHANE



Brian Schneider

SINCE THE LATE 1970s and the advent of mountain biking, winter riding has become an increasingly popular activity in interior Alaska, where the temperature for six months of the year is often below freezing. The use of bicycles for winter travel isn't new, though. In the late 1800s during the Gold Rush era, numerous individuals bicycled from Whitehorse, Yukon Territory, and from Skagway and Valdez, Alaska, to the Klondike and Nome goldfields.

Not having today's high-tech mountain bikes, these stalwart wheelmen pedaled heavy one-speed bicycles with wooden rims. They traveled with minimal gear, and stayed at roadhouses located about ten miles apart. There they were provided with lodging and food. (The personal accounts of several of these riders are included in Terrence Cole's book *Wheels on Ice: Bicycling in Alaska, 1898-1908.* Anchorage: Northwest Publishing, 1985.)

My initiation into the sport of winter off-road riding was more gradual. For several years I was a cold-weather commuter. In Fairbanks' extremely cold temperatures it was easier to start my bicycle than my truck. It was primarily during these short, ten-mile round-trip jaunts that I learned what clothing worked best for me in sub-zero conditions.

I found that I preferred to wear a number of lightweight items rather than one or two bulky items because I could, depending on the temperature and wind, add or shed layers. Now when commuting or trail riding, I wear a medium-weight long-sleeved polypropylene shirt next to my skin. (Polypropylene wicks out sweat and has some insulating properties.) Over this I wear either a wool sweater or pile jacket since both these materials are excellent insulators. My outer layer, a lightweight nylon jacket, has a 50-percent-cotton/50-percent-polyester liner. The jacket is both breathable and offers wind protection.

I also wear polypropylene long underwear, and a pair of polypropylene pants with a nylon shell over the front for wind protection. When it's -30° F or colder, I don a pair of medium-weight pile pants.

It's essential to keep the face, fingers and toes covered in below-zero temperatures because wind and cold will cause frostbite if the skin surface is left exposed. A neoprene, down, or wool face mask will provide adequate face protection. For eyeglass wearers, prescription goggles are a good investment, because with any conventional face covering, glasses will quickly fog up. Thinsulate gloves, or wool mittens with nylon or leather shells, and a pair of loose-fitting boots (preferably Thinsulate) are a must.

Loose-fitting boots won't hamper circulation and will allow you to wear a few pairs of socks. Alternating layers of polypropylene and wool socks have worked well for me. Overbooties made of a water-resistant material such as nylon or Gore-Tex will keep the feet dry when creek overflow is encountered. Antiperspirant put on the feet beforehand will also reduce sweat later on.

Since the body loses about 90 percent of its heat through the head, a warm hat is necessary. Mine (a Yazoo; $24 from R.E.I.), is made of Gore-Tex and lined with polar fleece. It also has flaps which, when fastened, protect my ears from the cold.

I didn't attempt any long trail rides until I was confident that I could keep warm for extended periods of time. Since my neighborhood is used heavily by dog mushers, skiers and snowmobilers, it was inevitable that I take to the trails. In the colder months, many areas inaccessible by foot are accessible once the trails freeze over. In Alaska, the best riding trails are the ones that have been packed down by snowmobiles or dog teams — more than a few inches of fresh snow makes riding difficult.

Letting air out of my tires makes it easier to ride on softer snow — with less air I have a wider tread, so my wheels aren't as apt to sink into the trail. 2.2-inch Specialized Hardpacks are currently the widest mountain bike tire available. Wider rims also make riding easier. I found gluing my tires onto the rims so that the valve stems of the tubes won't shift and tear prevents flats. Naturally, lighter riders tend to sink less than heavier ones.

Although I've ridden at temperatures of -30° F and lower, I don't recommend this unless one adds a lightweight grease or oil to the bicycle's bearing compartments. At these temperatures the grease in the bicycle's headset, hubs, and bottom bracket freezes, and pedaling and steering become difficult.

Training for the Iditabike I used conventional water-bottle containers on the trails near my

Pete Praetorius

The mass start of the Iditabike snowbiking race. (Below) The author at the Rabbit Lake checkpoint, about 130 miles into the race.

house, but during the race I carried water bottles wrapped in an old closed-cell foam (Ensolite) ground pad. While my insulated containers didn't freeze as quickly as the other riders' uninsulated ones, they still froze. I also carried these bottles in panniers, which meant I had to stop and remove them whenever I wanted a drink of water. Consequently, I didn't drink as much as I should have.

Many of the Iditabike competitors carried bottles which were held in place with chest harnesses. This system, while convenient, also had its drawbacks. Many riders noted that the water froze in the straws. And in the 1989 Iditabike, at least two riders fell and coated themselves with cold water.

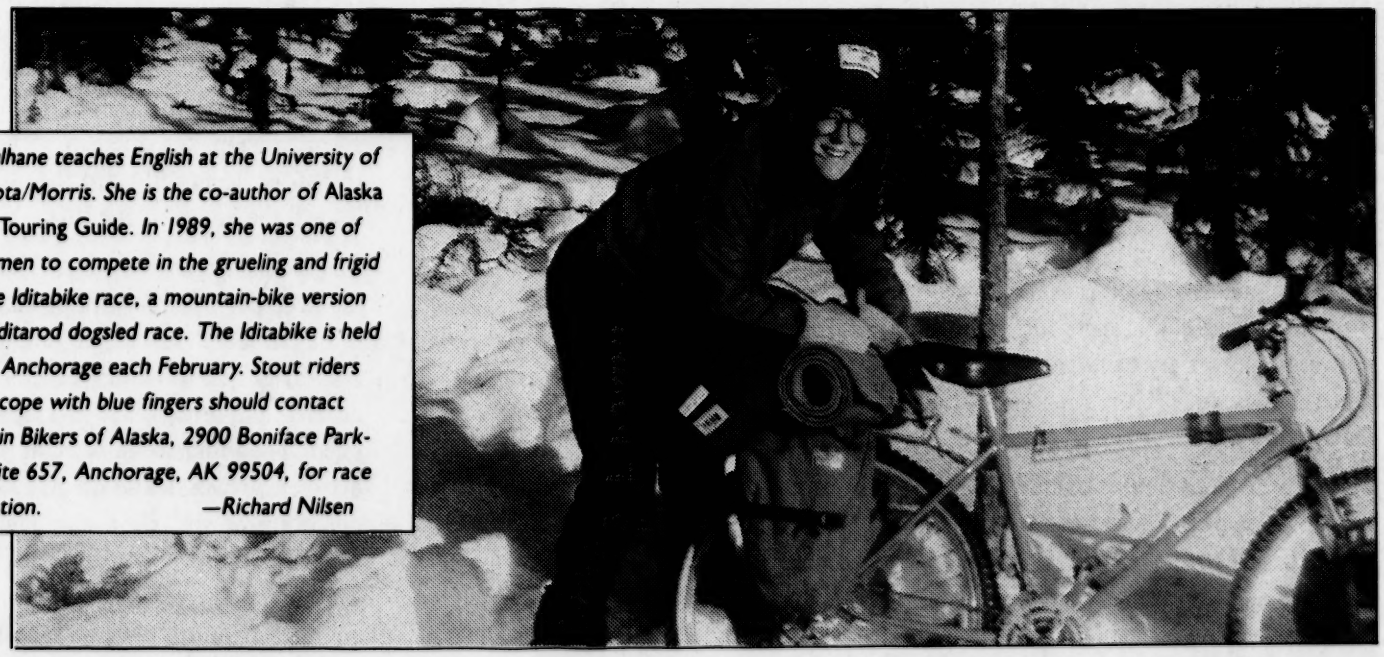
I was well prepared food-wise for the Iditabike. I left the start, Knik Lake, with homemade high-glucose brownies and energy bars, granola, oranges, and prepackaged macaroni-and-cheese dinners. These foods were high in sugar and carbohydrates and thus a good source of quick energy. Perhaps because I was so apprehensive about getting lost, I ate little during the race. What I ignored was the fact that the human body, needing to produce heat, burns more calories in cold weather. Dehydrated, hungry and tired, I started to hallucinate at about the 120-mile point. I repeatedly thought that spruce trees were my fellow riders. Knowing that I needed rest, I set up camp. Fortunately I had all the gear that the Iditabike Organizing Committee recommended, including a sleeping bag and a bivvy sack. My panniers contained a stove for melting water, waterproof matches, flares, a ground pad, a cooking pot and a headlight for night riding. In retrospect, I think that all riders doing any lengthy winter trips should carry these items.

Pulling off the trail, I dug a trench with my cooking pot, put my three-pound down sleeping bag in my bivvy sack, crawled in and dozed lightly. Unfortunately I didn't put my water bottles or shoes in my sleeping bag — so when I got up in the morning they were frozen. I'd also brought along a borrowed stove which, at -20° F, didn't work. With my matches and some kindling from nearby trees, I started a small fire and melted water. Rehydrated, I rode to the next checkpoint, which was three miles away. My lapses in judgement during the course of this unplanned camping trip were due to the fact that I had a mild case of hypothermia. Defined, hypothermia is a state of low body temperature. When heat loss exceeds heat gain, the body temperature drops, and regulatory mechanisms are brought into play to increase heat production. Dressing warmly, eating regularly (to replace lost calories) and drinking lots of fluids helps to prevent both hypothermia and its counterpart, frostbite.

It's a misconception that moisture loss only occurs when it's warm — exertion in the cold also causes fluid loss. If fluids aren't replaced, then circulation will slow down. Thus, one of the first signs of hypothermia is shivering. As exposure to cold continues and the body temperature falls below 95° F, blood flow to the brain decreases. Judgement is impaired, and walking and talking become difficult. Below 86° F, shivering stops and the muscles become rigid. With further decreases in body temperature, the victim becomes unresponsive. Breathing may cease at body temperatures below 77° F.

I was lucky, in part because I was conditioned to riding in colder temperatures. Except for a mild case of cold-induced asthma, I suffered no adverse affects from doing the Iditabike, and a few days later was riding again.

My Iditabike experience made me even more aware of how easy it is, even on short trips, to get caught without the right gear. Whether trail riding or commuting, I now carry an extra pair of mittens, a spare hat and wool sweater, extra socks, fresh batteries for my headlamp, two full water bottles and energy bars. ■



Pete Praetorius

Alys Culhane teaches English at the University of Minnesota/Morris. She is the co-author of Alaska Bicycle Touring Guide. *In 1989, she was one of five women to compete in the grueling and frigid 210-mile Iditabike race, a mountain-bike version of the Iditarod dogsled race. The Iditabike is held outside Anchorage each February. Stout riders able to cope with blue fingers should contact Mountain Bikers of Alaska, 2900 Boniface Parkway, Suite 657, Anchorage, AK 99504, for race information.* —Richard Nilsen

BY STEWART BRAND

COSTA RICA SAVES WORLD

"What took so long?" says World

COSTA RICA IS A BEAUTIFUL, variegated, shockingly convenient country to explore, and it stands as a world-class exemplar of superior organizational learning. For a tiny country it has an extraordinarily rich biological environment, with habitats varying every few steps and a seemingly infinite variety of organisms in seething levels of coevolutionary combat and collaboration. All that is what attracted my group to the country between Panama and Nicaragua last June.

The occasion was one of a series of private conferences that I've been running on "Learning in Complex Systems." Our usual participants are anthropologist Catherine Bateson (new book out, *Composing a Life*), computer scientist Danny Hillis (deviser of the massively parallel Connection Machine), James Lovelock (recent book, *The Ages of Gaia*), artificial intelligencer Marvin Minsky, systems dynamicist John Morecroft, computer educationist Seymour Papert, global futurist Peter Schwartz, autopoietic biologist Francisco Varela (recent book, *The Tree of Knowledge*), and field biologist Peter Warshall. The conferences have been sponsored (and joined) by strategic planners at Royal Dutch/Shell, AT&T, and Volvo.

The conferences derive from the thinking of one Arie de Geus, of Shell, who sees planning as learning. In the turbulent business environment of the current decades, often the only competitive advantage a company has is how quickly and accurately it learns. Taking the approach that learning is a bundle of mysteries much fragmented by divisive academic disciplines, our conferences set about converging a variety of talents on the general question, "How do organizations learn and fail to learn?"

A major element (and attraction, since no one is paid) of the series of conferences is their learning-exemplary locales. One was at the Biosphere II experiment in Arizona, which is isolating several thousand species (including humans) in a hermetically sealed mini-ecosystem. One was at Thinking Machines Corp. in Cambridge, Massachusetts, where the next generation of computer technology is taking shape. One was in Sweden, at Volvo's new factory which makes cars without an assembly line — a small team builds the whole car, and pride to match. One was in California at the superb Monterey Aquarium and at Esalen Institute (where among other things the group took a workshop in theatrical improvisation). Going to Costa Rica was a long-time ambition of the conference participants, to see why one Central American nation stands out so much from its neighbors in its talent for adaptability and long-term thinking.

The participants in the Costa Rica Learning Conference were: Peter Warshall, his friend Diana Hadley (whose fluent Latin American Spanish and deep knowledge of Mexican history — for comparison — were invaluable), Danny Hillis, Jim and Barbara Pagos from AT&T, Catherine Bateson and her 20-year-old theatrical daughter Sevanne Kassarjian (Vanni), organizer Danica Remy, me, and wife Patty Phelan. Costa Rican participants were President Oscar Arias, head of National Parks Alvaro Umaña, his staffer Carlos Quesada, and head of the La Gloria department store chain Juan Carlos Crespo. Because so many of the usual Learning Conference participants were unable to attend in Costa Rica, I made a detailed report for the absentees. At Kevin Kelly's request I lightly rewrote the report into this article — more like a long postcard, really.

So . . . Early on June 5 everyone headed by spectacular small plane to the Tortuguero National Park, a swampy rain forest on the Caribbean coast. We stayed at Tortuga Lodge, a nicely run place that I think all of us would recommend — good rooms, good food, fine people, and an amazing location. The main event was guided boat tours up the rivers and canals that vein all through the forest. Peter Warshall's bio-knowledge was supplemented by local biologist and guide Jim Lewis. Both would explain not only what a creature or plant was, but what it was up to. The sloth stays forever safe in the trees except for that few minutes every couple weeks when he descends to the ground to defecate, and a jaguar can get him.

Warm rain fell whenever it felt like it, until we stopped noticing. Everyone was developing wildlife eyes — being able to catch a distant tiny flicker of movement and quickly translate it: "Look, there's aNOTHER kind of kingfisher!" (There were six species on the river.) Nearly everyone's binoculars fogged up in the rain and had to be baked in an oveny cabinet under the bar back at the lodge.

We were at Tortuguero two nights. The first night we went strolling for turtles on the endless sand beach — the famous green turtle egg-laying spectacle was to begin any night. You stumble along in the dark (they don't like lights) looking for a track "like a unicycle tank." Finally we came across one. You could HEAR her, groaning and sighing and grinding up the beach, huge, alive, a force of nature like a thunderstorm. She was executing a "half-moon" — checking out the beach without laying eggs yet. As she headed back toward the water, two of our males took hold of her upper shell to hold her back a little. Seemingly as big as a Volkswagen, she dragged both of them, their four heels adding to the deep track, toward the haven of the surf.

The second night was a boat ride into the deep dark jungle with brilliant spot beams to jacklight the animals. You could cruise right up to within 6 inches of a dazzled miniature kingfisher, sparrow-sized. The jungle by spotbeam is a cross between fireworks and dreamland. At one point we shut down the lights and talk and listened in the stilly dark to the gentle rain, the stirring, calling creatures, and the far murmur of surf, timeless.

Danny Hillis

Next day we flew back toward the capitol of San Jose, noting that the lowlands rainforest has been transformed in recent years from 20 percent cleared for agriculture to 80 percent cleared, mostly by homesteaders. The Costa Rica Expeditions people took us by van to a brand-new mountain river forest trail in Braulio Carrillo National Park. It was high forest with a dense understory due to occasional scouring by the nearby river. Everything seemed to be growing and rotting simultaneously. I could see how people become addicted to rain forests: there's no end to their complexity. See that trail of leaf-cutter ants? Those myriad leaf fragments being borne like banners will go and be partially digested and then fed to a huge underground fungus farm the nest maintains that feeds all the ants. Notice that on each leaf is one or more ants riding along, adding to the load of the ant carrying the leaf? They're on there to head off the fly that specializes in laying eggs on leaves headed for the fungus, because the fly larvae mature in the fungus. This nest's fungus farm must be fly-infested, and that's why they have so many ants patrolling the leaves.

You sensed that if you died on that humid, teeming forest floor, in a few hours there'd be more life in the habitat of your swelling body than when you occupied it.

Again and again we saw that in the constant climate of the tropics, nearly all the evolution and adaptation is COevolution — evolving toward or away from other organisms who are evolving right back. Meanwhile Peter Warshall was looking for an even larger pattern: what is the overall driving force here? He guessed that it might be maximization of the leaf/air interface — like lungs, the tiny alveoli making a densely fractal sponge. The landscape respires profoundly.

After lunch at a park ranger station, we cooled off in a mountain pool, diving from the rock cliffs, watching swallow-tailed kites soaring brilliantly. We drove back to San Jose and did the thing that all tourists should do: visit a many-stalled food market with locally knowledgeable people and learn about the native fruits and vegetables. We ate amazing morsels — passion fruit that you sucked the crunchy seeds of, some melon-like thing whose meat was like sweet paste. Then a line squall burst over us at an ice cream takeout joint with horizontal rain and roaring thunder. Back to the Cariari Hotel for the rest of our stay.

Thursday morn, June 8, some of us caught an interesting vignette at the museum near the enormous crater of the Irazu Volcano, which bubbles sulphurously. A touring group of Americans from Elderhostel were getting The Word from their young Costa Rican guide, Larry Sanchez. In front of a map of the nation, Sanchez was explaining in fluent English about Costa Rica's plans to become a "mega-park" — the whole country one big park. He praised biologist Daniel Janzen for teaching the advantages and realistic techniques of restoration of the natural environment, starting with the Guanacaste dry forest. He praised Minister of National Parks Alvaro Umaña for bringing together the formerly competitive wildlife agency, national forest agency, and national park system, so that now they supplement rather than snipe at each other. His listeners, as alertly old as he was alertly young, clearly loved and admired him. Retired people, I realized, are a powerful lobbying force for environmental causes — they've got time, smarts, and short-timers' honesty, and their concern is with the ages. Sanchez was a living example of something we heard many times: "There are no cynics in Costa Rica."

That afternoon our group went to the suburban home of Costa Rica's President, Oscar Arias, winner of the Nobel Peace Prize last year for what's known as "the Arias Peace Plan" for Central America. Only mildly fancy on the outside, the house was classy inside, with a rich collection of European art, books, etc. His family has been wealthy for some while.

Alvaro Umaña began the meeting. The Minister of Mines, Energy, and Natural

Resources is young (Stanford '73), cheery, and sharp. He reported that on Monday Costa Rica had launched a "Biodiversity Institute" to assess the nation's total biodiversity. He said that Costa Rica has 1/10,000th of the Earth's surface but 5 percent of its species (10 percent of its butterfly species). He said that education is at the heart of preserving the natural environment, and that most education comes through the TV, and 90 percent of Costa Rican homes have TV. At the same time, Costa Rica has had 130 years of free, compulsory schooling. To keep the urban area of San Jose from drawing able people away from the countryside, great efforts are made to provide good services in the rural areas, such as phones, electricity, welfare benefits, etc.

Umaña said that the national parks should be like medieval cathedrals, cherished by the centuries.

He said that population growth has diminished from 5.4 percent annually in 1954 to 2.7 percent now. This was accomplished by encouraging women in the workforce (later child-bearing), access to birth control (in a completely Catholic country), and child mortality which is the lowest in the Third World (so people don't have extra children for insurance). San Jose has a superb hospital specializing in dehydration diseases — the diarrhea that kills more children in the world than any other ailment. There is also a universal health plan and pension plan for the elderly, so that children are not required for old-age support.

Soft-spoken Arias took up the theme. "Costa Rica is a welfare state instead of a garrison state. It's expensive, but it's less expensive than having a military." He explained that Costa Rica has been a democracy for 100 years as of next year. In 1948 Jose Figueres used a small army to win the country's worst civil war, took over the government, and promptly abolished the army and instituted an array of liberal reforms. Arias said that the former garrisons are now libraries and museums. Five percent of Costa Rica's GNP goes to education.

He said that housing is his main priority. He wants a slum-free and poverty-free society. He wants to increase exports to $2 billion a year. He feels that Costa Rica can serve as a "living laboratory" for the world, that it can demonstrate a truly egalitarian society with social mobility, broad education, wider distribution of land ownership, and healthy investment in rural areas. (This "saving the world" frame of reference is something we ran into everywhere.)

Umaña addressed the issue of energy. He said his people were working on a 20-year energy plan. They're pushing for significant energy conservation in the home (90 percent of homes have electricity).

Danny Hillis asked Arias what things America needs to understand better about Costa Rica. Arias said the US should understand that "Good friends sometimes disagree." He praised President Bush's "courage and humility" in reversing Reagan's policies in Central America. He was concerned about the US plan to greatly reduce foreign aid to Costa Rica, saying "It looks like we're being punished for our successes. That's no encouragement." Costa Rican unemployment is down to 5.5 percent, the lowest in Latin America, and inflation is 12 percent per year (instead of per day, as elsewhere).

Diana Hadley asked what aspects of the Costa Rican programs might be most important to other Latin countries. Arias said that having no army was the main thing. I asked him how long before you get benefits from getting rid of a standing military? He smiled: "The next day."

Danny asked, what have been some of Costa Rica's mistakes? Arias said one failing was not having wide enough property ownership — only 250,000 (out of 3 million) Costa Ricans own land. He wants a more Danish model. He said the press in his country is too uniform and conservative, pushing a constant US line; he'd like more pluralism. He said that Costa Rica accepted too many loans from US banks.

We left. Impressed. In a short debriefing meeting afterward everyone expressed admiration for Arias's style and content, along with a wistful envy of the enthusiastic idealism we saw everywhere, so in contrast to the somewhat grim idealism of, say, Sweden.

The next morning in our meeting room in the Cariari Hotel, the first guest we heard from was Juan Carlos Crespo, head of La Gloria department stores. (Yvon Chouinard, founder of the renowned Patagonia outdoor clothing line, had raved to us about Crespo, so we phoned him and he responded.) La Gloria has been run by Crespo's family for 87 years, he said, and they'd like to keep the company going another thousand years, so they see the long-term welfare of their country and customers as directly in their interest. Crespo is deeply involved in preservation projects — he's head of the National Park Foundation and The Neotropical Foundation and participates widely in environmental organizations and projects. That weekend he was planning to do some cave exploring up north

Danny Hillis

Learning conference attendees studying the way biology "learns" in a Costa Rican rainforest.

and invited any of us to join his group; Vanni almost went.

Crespo opined that government should be constantly pressed by ideas and movements in the private sector. He said that a serious preservation program in any area takes 50 years — you begin with food and diet of people living in the area, then you build better agricultural practices, THEN you can reforest. Catherine said she was impressed that Costa Rica routinely began its projects by first building local confidence and empowerment, such as by reducing child mortality.

We urged Crespo to talk about his stores. He said management is extremely informal. His father doesn't have an office; he's on the floor all the time. Thirty years ago the company started a "solidarity" program with its employees, in which salary saved by employees would be matched by the company. The employees now own 35 percent of the branch stores and have their own country club. There's no strikes. The company is catching flak from international unions and even Costa Rica's congress, but the system is being much studied from abroad. La Gloria has a policy of evening out economic disruptions by making sacrifices to keep prices low when times are tight, figuring they'll make it back on customer loyalty when times get fatter again.

A most appealing young man.

Next was Carlos Quesada from the National Parks, who had a wealth of slides and statistics to show and detailed answers to some of our questions. A chart of civil wars, insurrections, invasions, etc. showed that they decreased radically after demilitarization in 1948. There was an invasion from Nicaragua in 1955, headed off by outraged locals fighting back and the OAS (Organization of American States) shaming Nicaragua for attacking an unarmed nation.

The state owns the rivers. Half of all Costa Rica is under 19. Quesada got his environmental religion at the first Earth Day in 1970, at Fort Collins, Colorado.

In 1963 Costa Rica had the worst telecommunications in Central America (10,000 phones); by 1986 it had the best (250,000 phones). Electricity and phone service were seen as one project. Jim Pagos from AT&T said he was impressed at the quality of service.

After our guests left, the group discussed Costa Rica as an exemplary learning organization the rest of the day and during sessions on Saturday and Sunday. Diana noted that both Costa Rica and Mexico introduced in the '40s reform ideas that would have been highly suspect in the US, but America was distracted with battling Germany and Japan at the time. If the reforms had been introduced in the McCarthyite '50s, the US probably would have interfered. Costa Rica did far better than Mexico in implementing the reforms and building on their success.

The shock in Costa Rica is that no one seems to be left out of the system. There are no "jeepneys" or "le trucks" handling informal transportation. At the airport there are few offers of black-market currency exchange, and what there are don't have very interesting rates (85 colones to the dollar instead of 81.5). I asked Arias if he'd read Hernando de Soto's *The Other Path* (about Peru's informal economy), and he replied he had but stopped after a couple chapters because it didn't apply to Costa Rica.

Costa Rica is conspicuously open to European and North American ideas and people. The country has regularly infused its university with European intellectuals and has expanded the practice with its newish U.N. Peace University (which we visited and were uninspired by). The country has an extremely liberal policy toward retired people from other countries, so there is a strong expatriate influence. European art and culture is venerated, even including a flourishing opera house, but this is no Argentina institutionalizing European decadence. The vision of being a "living laboratory" is expressed by inviting all sorts of foreign social engineers from ineffective to effective (such as Amory Lovins), trying their wares, and keeping what seems to work. World-savers flock to Costa Rica.

What's missing? Peter Warshall and Vanni Kassarjian were appalled at the lack of any indigenous art. Vanni said, "There's no street artists or musicians or theater; no poets like in the neighboring countries; the painting looks like European retread." When we went to dinner at the fancy Tiquicia restaurant overlooking nighttime San Jose to eat "typical" Costa Rican food — rice and beans — and watch "typical" Costa Rican dancing, it turned out, to Peter's and Diana's disgust, to be pale derivative Mexican "ranchero" music and dance. Catherine asked, "What kind of success is it if they have no art?"

It's a Swiss success. Maybe art grows best in "failure." It's clear that much of the best poetry and narrative writing comes out of places like Ireland and the American South and Mexico, which are deeply, insolubly conflicted.

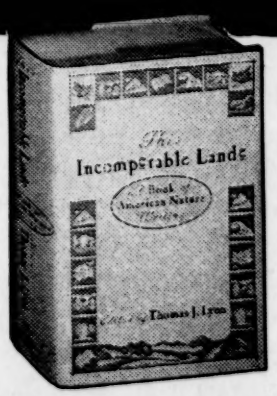
After conference meetings all Saturday, on Sunday the group rafted the Reventazon River — deemed a gentle "3" in difficulty and danger — and Catherine was startled to discover she loved rafting. Its headlong chaos was widely contrasted with the precision of rowing a Viking longboat in Sweden (a prior adventure in which we demonstrated mixed success at group learning).

I won't try to summarize the content of the conference discussions. The following might suffice as samples.

Danny Hillis submitted an unfinished paper which asked the painful question, "Why do groups act more stupidly than the people in them?" The problem is that a group adopts norms — habits of behavior — and anyone who changes behavior (by evincing or attempting learning) thereby betrays the group and will be punished or ignored accordingly. Danny commented that he intends to add to the paper some thoughts about the role of a leader, who CAN have a change of mind without betraying the group.

I recall Danny responding to a question about the difference between operating in an academic institution versus a business institution: "In academia you're rewarded for being smart; in business you're rewarded only for being right."

Catherine Bateson said she is gradually undertaking another book which will look at the double meaning of "control" — purposiveness versus responsiveness. The kind of control a boss has versus the kind of control that balances an ecological community. It's usually interpreted, she said, as active versus passive. She wondered whether responsive control might not be more active than it looks, thriving on improvisation, avoiding the narrowing of attention that goes with overstated purpose. Effective learning organizations, she suggested, don't try too hard to control. ■



This Incomperable Lande
Edited and with a history by Thomas J. Lyon. 1989; 495 pp.

$29.95 postpaid from Houghton Mifflin Co./attn.: mail order dept., Wayside Road, Burlington, MA 01803; 800/225-3362 (or Whole Earth Access).

This Incomperable Lande

In a publishing world increasingly preoccupied with instant diets and shopping-mall franchises, it's heartening that books like this one still get made. Nonfictional selections by 22 of what the editor calls "European-American 'white man'" make up the bulk of the book. Ranging from the 1630s to the present, here are Audubon, Thoreau and Muir, and also Carson, Matthiessen and Abbey. Preceding the selections is a 90-page essay on the history of this often-neglected genre by Thomas Lyon, an English professor at Utah State University. It's a pleasure watching his organized mind moving chronologically through this thicket of wonderful writing. And at the end are 78 pages of Lyon's annotated listings of "the best American nature writing," the most intriguing bibliography I've browsed in many a moon. It all adds up to a literary/reference jewel. —Richard Nilsen

•

Muir's transmutation of the fear of death into a hymn of praise, a motif often repeated in his work, is closely related to his concept of wilderness as familiar. To Muir, wilderness was not any sort of "other," much less a threat, but simply the most obvious manifestation of the total patterning of things; not chaos but a complete, unified order that included humans. His best statement of this point was in "Wild Wool," an 1875 essay later reprinted in *Steep Trails* (1918), in which he held that all creatures are "killing and being killed, eating and being eaten," and that this constant predation results only in harmony and rightness: "And it is right that we should thus reciprocally make use of one another, rob, cook, and consume, to the utmost of our healthy abilities and desires." All would be well in this naturalistic universe except that man, thinking himself special, has interfered with the evolutionary integrity of other beings in the pattern and bent them to his exclusive use. Taming apples, roses, and sheep, he proceeds to build up not only an economy but a mentality of separateness, and loses sight of the beautiful fitness of things.

> No dogma taught by the present civilization seems to form so insuperable an obstacle in the way of a right understanding of the relations which culture sustains to wildness, as that which declares that the world was made especially for the uses of men. Every animal, plant, and crystal controverts it in the plainest terms. Yet it is taught from century to century as something ever new and precious, and in the resulting darkness the enormous conceit is allowed to go unchallenged.
> —*From T. J. Lyon's introduction: "A History"*

Rural Property Bulletin

From Prescott, Arizona, comes this 9-year-old rural-real-estate shopper with national coverage. It's all ads, mostly brief print ones, listed by state. There is also a section just for people looking for vacation resort property. For sellers, it is a cheap place to toot your horn — 20 cents per word with a three-dollar minimum. —Richard Nilsen

Rural Property Bulletin
Sandy Weaver, Editor

$12 /year (12 issues) from Rural Property Bulletin, P. O. Box 4331, Prescott, AZ 86302; 602/775-5807.

NEW MEXICO

INDIAN RUINS
On 320 acres, near Blue Water, NM. 2 BR, 2 bath house. Land has sandstone cliffs, malpais, petrified wood and is entirely fenced. Dozens of 1000 yr. old ruins. $500 per acre. 303-259 6555. f7

SECLUDED log cabin set in aspens, 10 mi. north of Red River, NM. Winterized, 3 bdrm plus sleeping loft, 2 bath, excel. snowmobiling, skiing & fishing, adjacent to nat'l. forest. $68,000. 806-353-4944.

HOOD Canal, Brinnon. 5 acres, beautiful water, mtn. view, road & bldg. site. $1000 & owner will carry. May consider Class A motor home as trade. 206-376-2165.

ATTENTION SPORTSMEN!
Check this out. 666 acres, pasture, irrigated farm land & bottom land, borders Crab Creek near Wilson Creek, WA. Heart of hunting, fishing & golfing. $10,000 per year CRP fixed income. Sodium mine potential. Sale by owners, terms. $285,000. 509-982-2359.

WENATCHEE area horse ranch, FORECLOSURE, 40 acre wooded lot. Great location just 8 mi. west of Walsenberg, 5 mi. from Lathrop State Lake, 15 mi. from Cacheras Ski area. Power avail., Comparable lots selling at $30,000. Private owner. Must sell, $14,900, OWC or $12,900 cash. 303-431-5913; 423-3222.

ILLINOIS

BY OWNER, 120 acres, 10 mi. NE of Jerseyville. 105 acres tillable, 40 acres in crop at $105 per acre. Balance excel. corn ground. Priced to sell. 618-498-3370.

FLORIDA

SUWANNEE River, 3.75 acres in bend of river with extra high bluff. Only 1/2 mi. from county boat ramp. Approx. 10 mi. NW of Live Oak. $25,000, terms. 904-332-6717.

BY OWNER, 19.7 acres, fenced, 4 bdrm, 2 bath, double wide mobile home. 3 mi. north of Starke. $68,000, offer. 904-964-4514.

BY OWNER, 14 acres, west Nassau County, river. Brick 2 bdrm, 1+ bath, fireplace, extras. $96,500. 904-879-3478

Tree Books by Alex Shigo

Alex Shigo is standing the staid world of tree care on its head. He is another veteran of the U.S. Forest Service (26 years) with something novel to say, and has "retired" to become a one-man publishing and lecturing business. A plant pathologist by training, he spent his federal career studying decay in trees. He has personally dissected over 15,000 trees with a chainsaw. Not cut them down, but dissected, like a coroner does a cadaver for an autopsy. The analogy to the evolution of human surgery is worth making, because Shigo (rhymes with "I go") believes traditional tree-care practices are full of myths and superstitious misinformation, and he is busy replacing this with structural analysis.

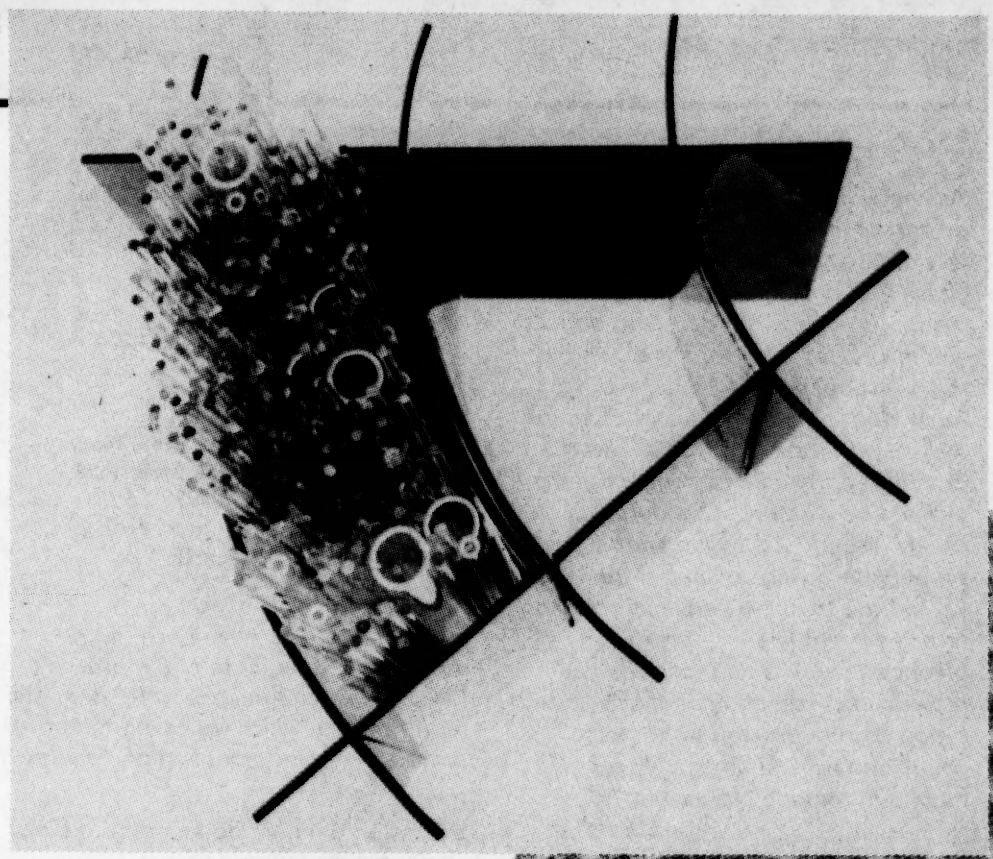
Take branches. Branches, it turns out, really aren't structurally attached to tree trunks at all (if they were, they could never withstand high winds). Instead, a series of interlocking collars from the branch tissue and from the tree trunk continue to overlap one another and provide a connection with both strength and flexibility. Therefore the standard pruning cut, flush against the trunk or limb, is wrong, because it removes this collar, creates a large wound that won't heal, and invites diseases to enter the tree. The proper pruning cut, says Shigo, is next to the branch collar, not through it.

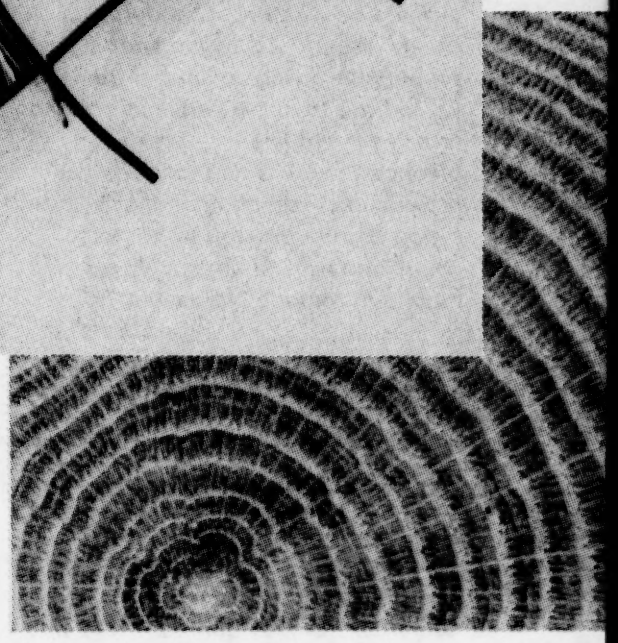
***A New Tree Biology** is Shigo's bible. Conversational in tone, it is structured as a series of lengthy captions describing numerous excellent black-and-white photos of trees, from micro- to macroscale. For libraries and tree professionals, yes; for others, the price, though not out of line for a 600-page illustrated hardback textbook, will be a factor.*

***A New Tree Biology Dictionary** is unillustrated and meant to be a companion to **A New Tree Biology**. The entries range from short paragraphs to a page, and both define and give Shigo an opportunity to present his wholistic tree philosophy.*

*The best place to begin is with **Tree Pruning**. It makes all the major points about tree structure and pruning technique, and has excellent color photographs that make dos and don'ts easy to grasp.* —*Richard Nilsen*

Comparison of Pruning Cuts on Oak
Two samples from the same red oak tree that had branches of the same size and age cut off 6 years before the tree was dissected. The improper cut at left had large ribs of woundwood and a large column of rot. No rot developed after the proper cut. A ring of woundwood formed and the wood-inhabiting organisms were compartmentalized. (Maine) —***Tree Pruning***

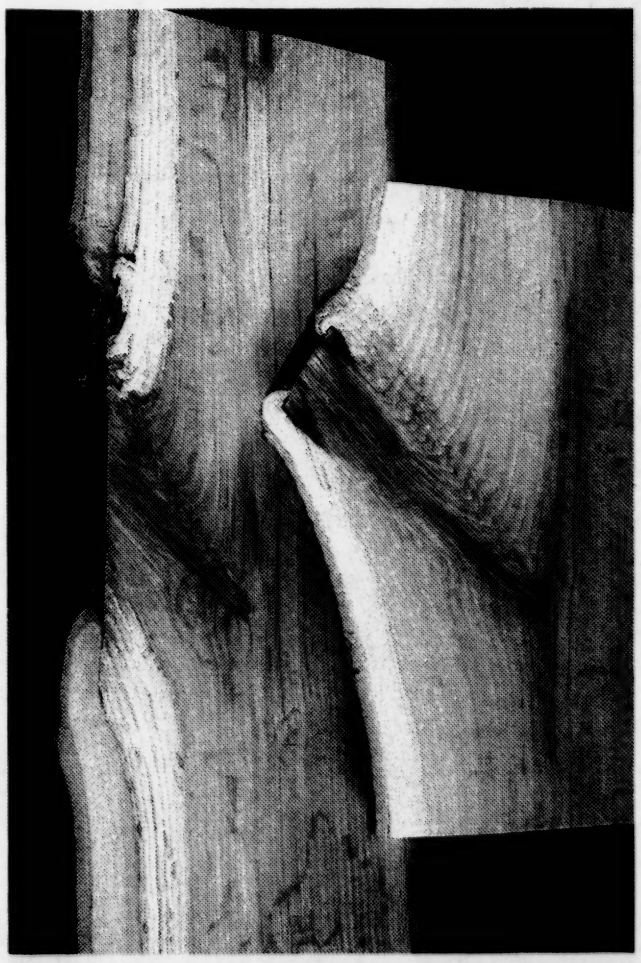




Models were constructed to show how trees are compartmented. The cell is the basic compartment. Each growth ring is divided into compartments as sheets of radial cells divide the rings like spokes in a wheel. The growth rings are then divided into compartments that "hold" the cells. The growth ring is also a compartment. Trees are highly compartmented plants.
—***A New Tree Biology***

A New Tree Biology: $52
A New Tree Biology Dictionary: $13
Tree Pruning: $39
(postage and handling **$3**/book; brochure **free**)

All from Shigo and Trees, Associates, 4 Denbow Road, Durham, NH 03824; 603/868-7459



Dog Law

As one who lives easily without a dog as part of the family, I have noted with wry amusement that when dog owners claim their pet is well-behaved, they mean that it does not act like a dog. To me, this seems a bit unnatural, and, if the newspapers are telling the truth, many dogs find that state unnatural as well. Hence trouble: for dog, owner, and third party whether aggressor or victim. This wise and often funny book covers just about any imaginable legal situation involving canines, though you'll have to fine-tune the information to bring it into line with your local ordinances. There is an especially fine blow-by-blow description of how to take a dog dispute through small-claims court, and win. Another truly excellent legal aid from the Nolo crew.

—J. Baldwin

•

The very best of [dogs] can, with less effort and in a shorter space of time, make themselves more of a nuisance to the square inch than any other domestic quadruped of which we have any knowledge. *—California Court of Appeals*

•

What can a tenant do to assure a skeptical landlord that a dog won't be a problem? Praise from the obviously prejudiced dog owner is not the best evidence. References from previous landlords or neighbors are great; a brief letter saying what a nice, well-mannered pet the tenant has should go a long way with a prospective landlord.

•

Dog-Bite Statutes

Twenty-eight states and the District of Columbia have statutes that make dog owners liable if their dogs cause injury. They are called "strict liability" statutes because they impose liability without fault — an injured person does not have to prove that the dog owner did anything wrong.

The theory behind these laws is that anyone who has a dog should be responsible for any damage it causes, period. It doesn't matter that the owner was careful with the dog, or didn't know it would hurt anyone, or conscientiously tried to keep it from hurting anyone.

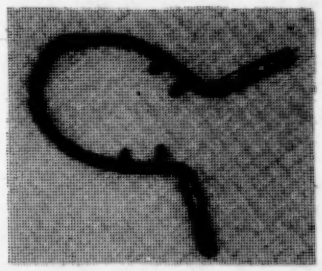
Dog Law
Mary Randolph, 1988.
$12.95 ($15.45 postpaid) from Nolo Press, 950 Parker Street, Berkeley, CA 94710. 800/992-6656 (CA); 800/445-6656 (national) (or Whole Earth Access).

Nite Lite

The Nite Lite company specilizes in dog supplies. Their catalog is filled with hunting equipment such as the Krypton Star Critter Lite, but the company also sells a variety of nylon and leather dog collars, training aids, vaccines and remedies that are useful for non-hunters like me.

—Joel M. Lee

Nite Lite
Catalog **free** from Nite Lite Company, P. O. Box 1, Clarksville, AR 72830; 800/648-5483.



HAND TREE CLIMBER

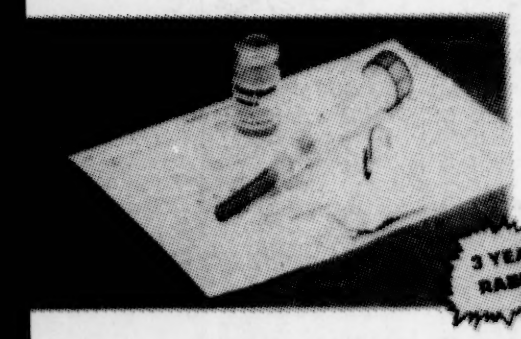
These flexible hand climbers are just the ticket for coon or deer hunters, whether climbing to your tree stand or going up to shake out a coon. Made of heavy duty steel and steel chain. Climb trees up to 12 inches in diameter, with ease. Easily folds up to carry in your pocket.

No. HST80 ..... $19.95

BOWL AND VALVE WATERER

Completely automatic, attaches to regular ½" water pipe.

No. 800P $18.95



PROFESSIONAL BRAND VACCINES

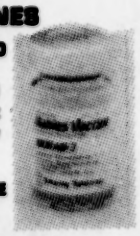
• FRESH • LONG DATED • LOW PRICED

Our vaccines are of the finest professional quality and always long dated. We do not buy short dated close outs to offer low prices.

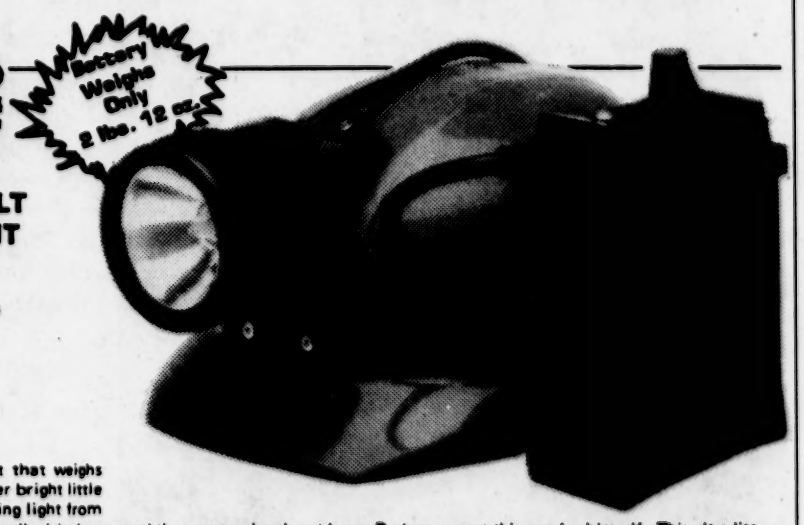
SORRY NO C.O.D's OR RETURNS ON VACCINE

THREE YEAR RABIES VACCINES

No. 1072 ..... 3 year single dose .... $2.50 ea.
10 Doses or more ..... $2.00 ea.



Kitten Kooner



THE ULTRA-LITE 4-VOLT RECHARGEABLE LIGHT

Weighs Only 2 lb. 12 oz.
Complete With Krypton Bulbs
Adjustable Beam
Complete With "The Head"
Molded Belt Loops

IMAGINE- A rechargeable hunting light that weighs only 2 pounds, 12 ounces! Yet this super bright little light gives up to 14 hours of bright hunting light from a full charge when using a PR 3 Bulb. An all night hunt, and then some. Look out boys, Dad may want this one for himself. This ultra-lite battery pack comes complete with "The Head", automatic charger, hardhat, Rheostat cover, and two Krypton Bulbs.
No. NLKK49 ..... Only $79.95

A Time to Reap

As the trivialized sound-bite information via television gets worse, radio news and documentaries get better. Here are four half-hour audio programs that examine American agriculture and explain the current sorry state of so many small farmers. Women and men working the land in Virginia, Kentucky and Tennessee are interviewed, along with experts like Marty Strange, Frankie Lappe and Wes Jackson. As narrator Studs Terkel says, "We've had cheap food and now we're paying the price." It is uncanny how well the song lyrics that are included convey current rural realities. If you live in an incorporated area and shop in a supermarket, these programs are aimed at you.

—Richard Nilsen

A Time To Reap
(Four half-hour programs on two cassettes). Maxine Kenny, producer.
$12 postpaid from Clinch River Educational Center, Route 2/Box 471, Nickelsville, VA 24271; 703/479-2176.

•

"You know a corporate farmer's more or less like a strip miner — he doesn't care about the land. He's only interested in that coal there, or whatever he's getting, and the heck with the land. But the small man knows that he'll be there for-

America's Neighborhood Bats

*The folks at Bat Conservation International, who sell the Bat Houses we reviewed two years ago (**WER** #55, p. 125) have published a dandy introduction to American bats that explains how to live with them and without them. With them by creating habitat, because bats consume amazing quantities of insects. And without them, via simple exclusion techniques that should never include poisoning, if too many of them find ways to get into you house and roost.*

The book has great color photographs and is especially good at explaining away the numerous fears most people have about bats. Nearly a quarter of the earth's mammalian species are bats, yet because of their specific nesting requirements — especially during winter hibernation in caves — they are often victims of mass extinctions. The consequences of this go far beyond the bats themselves, since many species of plants are solely dependent on bats for pollination. Bats have been around for 50 million years, and better mosquito-eaters have yet to be found.

—Richard Nilsen

•

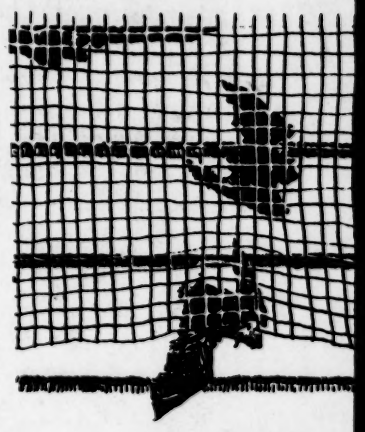
Even without a bat house, you may provide a roost for a few bats simply by using an 18-inch-wide piece of tar paper or similar material. Wrap and staple it completely around a tree trunk so that it is tight at the top and flares out about 2 inches at the bottom. This permits bats to select shady or sunny sides as their temperature needs change over the day and season.

•

The most serious problems arising from the sudden appearance of a bat are those created by panicked responses. . . .

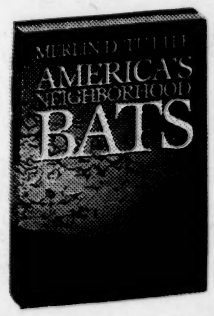
To understand the underlying reason for the bat's apparent swoops at your head, just put yourself in the same situation and imagine that you are the pilot of a small airplane. You cross the room, having to make a U-turn every time you come to a corner. When you make the turn you must virtually stop, causing a stall; and, as any pilot knows, you must quickly swoop downward to regain flight speed and control. The bottom of the swoop will occur near the middle of the room, where observers are most likely to be standing. This, of course, gives the false impression that the bat is attacking. . . .

Evening bat (*Nycticeius humeralis*), central and eastern United States to Mexico; spotted bat (*Euderma maculatum*), southwestern United States.



To exclude bats from a building use bird netting. Hang it over entry points so that it extends at least two feet below and to each side, the bottom edge being allowed to hang loosely from one to several inches away from the side of the building. This allows emerging bats to crawl under and out, but returning bats are unable to find their way in. The netting is normally used to protect fruit trees from birds, and it can be purchased from garden centers and some hardware stores.

America's Neighborhood Bats
Merlin D. Tuttle, 1988; 96 pp.
$9.95 ($10.95 postpaid) from University of Texas Press, P. O. Box 7819, Austin, TX 78713; 800/252-3206 (or Whole Earth Access).



ever, and maybe his family, and he takes care of his land. If he has enough money to do it. But at the present time a lot of 'em are raping the land trying to make enough money to pay the taxes."

—Farmer

•

". . . The agricultural exporting companies are extraordinarily powerful, and they need a lot of bushels of stuff traveling around in order to make money, because they get a cut on each bushel. . . . Cargill is based in Minnesota, but I don't think they really care whether they're moving Argentine wheat or Kansas wheat. . . . What they care about is that they move the greatest number of bushels of wheat around the world. And the cheaper it is the more you can move around. The more expensive it is, the more likely that each country is going to afford to be able to grow its own, and therefore Cargill will be moving less, and not make as much profit.

"We're arguing [for] a policy of managed production and higher basic material prices. . . . It would hurt the big grain companies, and processors, but it would help farmers and rural communities in this country, and it would also have a profound effect on the ability of third-world countries to pay off their debt . . . and raise enough food to feed themselves." *—Hal Hamilton*

The Antique Rose Emporium

Before there were the exotic sprays and fertilizers that let modern roses survive, there were wild roses. In between wild roses and modern roses were the old or "antique" roses. The Antique Rose Emporium has been collecting and propagating these old roses, and making them available by mail at reasonable prices.

Le Vesuve, 1825

Bearing large, fully double flowers with wonderfully muddled centers, as if someone had stirred these roses with a finger while the petals were going on, 'Le Vesuve' blooms often and freely in shades of carmine pink. A compact bush with heavier foliage than many Chinas it is vigorous and attractive anywhere in the garden or landscape. *3 to 5 feet.*

#0217 ..... **$7.50**

Their 70-page catalog really belongs on a reference shelf. Instead of glossy pictures and flowery descriptions (sorry) they give a brief history of each variety and realistic comments about its needs and characteristics. In addition to the roses, you'll find over 30 "companion plants," like Autumn Sage, Mexican Oregano, and Louisiana Phlox. There are a couple of pages of books listed, a collection of cedar garden furniture, and information on old-rose societies. The catalog is well indexed, and includes a generous section on the hows and whys of growing these things.

You can order by mail or phone, but don't expect them to just drop your rose in the next mail. They ship only from January to April, when the plants are dormant and can survive the trip. In fact, after April 1 they insist on UPS 2nd Day Air to protect the plants. If you plan to visit the emporium, call ahead to be sure the variety you want will be available. *—S. L. Simons*

The Antique Rose Emporium
Catalog
$3 from The Antique Rose Emporium, Route 5/Box 143, Brenham, TX 77833; 409/836-9051.

Radalert

Plymouth's Pilgrim I is still rated among the worst-run and least safe of all U.S. nuclear power plants. It is just 27 miles upwind of where I sit. The nearby nuke makes a lot of us Cape Codders extremely nervous. The only way off the Cape is toward Plymouth on two highways already jammed half the time, so it wasn't hard for me to raise almost $400 with a half-hour's phone calls. I was hoping to fill the Brewster gap in the network of volunteer radiation monitoring locations that encircle Pilgrim I by setting up a monitor here. The purpose of our network is to keep the plant operators on their toes because of our watchfulness (hah!). The $400 was for a radiation counter that turned out to cost far less, so our anti-nuke group has some extra dollars in its slender treasury.

I am now a morning-and-evening radiation count recorder. My Radalert monitor is said by those with long experience to be extremely accurate and dependable.

It can be set to display "counts per minute" or "total count" (which in a few hours produces frighteningly high figures). The criterion is counts per minute. If they stay in the vicinity of 12, all we're getting is background — i.e.: natural — radiation. But if the count goes to 30, off goes the beeper. It may indicate only an aberrant solar flare, or it could be our worst nightmare come true.

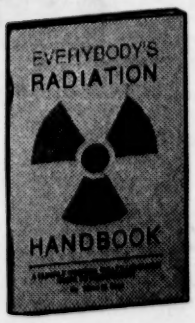
In any case, until that beeper beeps, I'll continue to record the numbers and send them to the network headquarters. I take the Radalert to the beach, to the dump, to the medical building, and to the basement (no radon here, thank goodness). So far, all the readings have been in the safe range. But I'm always half-listening for that over-30 warning that could mean the end of Cape Cod for the rest of human history.

—Malcolm Wells

Radalert
Nuclear Radiation Monitor
$275 (assembled);
$185 (unassembled) from International Medcom, 7497 Kennedy Road, Sebastopol, CA 95472. 800/255-3825 (CA); 800/257-3825 (nationwide).

Everybody's Radiation Handbook

Might as well understand what it is that you are measuring with the Radalert. Everything you need to know is served up here in lay terms, with maximum clarity and minimum rant & rave. *—J. Baldwin*



Everybody's Radiation Handbook
Steve M. Dean, 1989; 55 pp.
$6.95 postpaid from Aeon Research Company, 114 Nicholl Avenue, Point Richmond, CA 94810; 415/237-8299 (or Whole Earth Access).

The capacity for injury from ionizing radiation is known as RADIOSENSITIVITY. Different species of organisms, different age groups of the same species and even individual organs or tissues within the body have their own radiosensitivity.

SPECIES RADIOSENSITIVITY
Below is a table comparing humans to other organisms based on their radiosensitivity to X-ray doses.

ORGANISM	REM	CLASSIFICATION
Guinea pig	175-400	Mammals
Pig	350-400	↓
Dog	335	
Human	400-450	
Mouse	550-665	
Rat	590-970	
Rabbit	750-825	
Chicken	600-800	Warm-blooded vertebrate
Goldfish	670	Cold-blooded vertebrates
Frog	700	↓
Tortoise	1,500	
Snail	8,000-20,000	Invertebrates
Fruit fly	64,000	↓
Amoeba	100,000	Single-celled organisms
Paramecium	300,000-350,000	↓

This table demonstrates an important point. Most mammals, including humans, are much more radiosensitive than lower life-forms. Some species of insects (roaches, for example) actually increase in size and reproduce at a higher rate when highly irradiated. (This discovery lead to Hollywood's "giant insect monster" movies of the 1950s.)

Boeshield T-9

For those of us who would like to keep our machines running forever, rust often spells the inevitable end of our dreams.

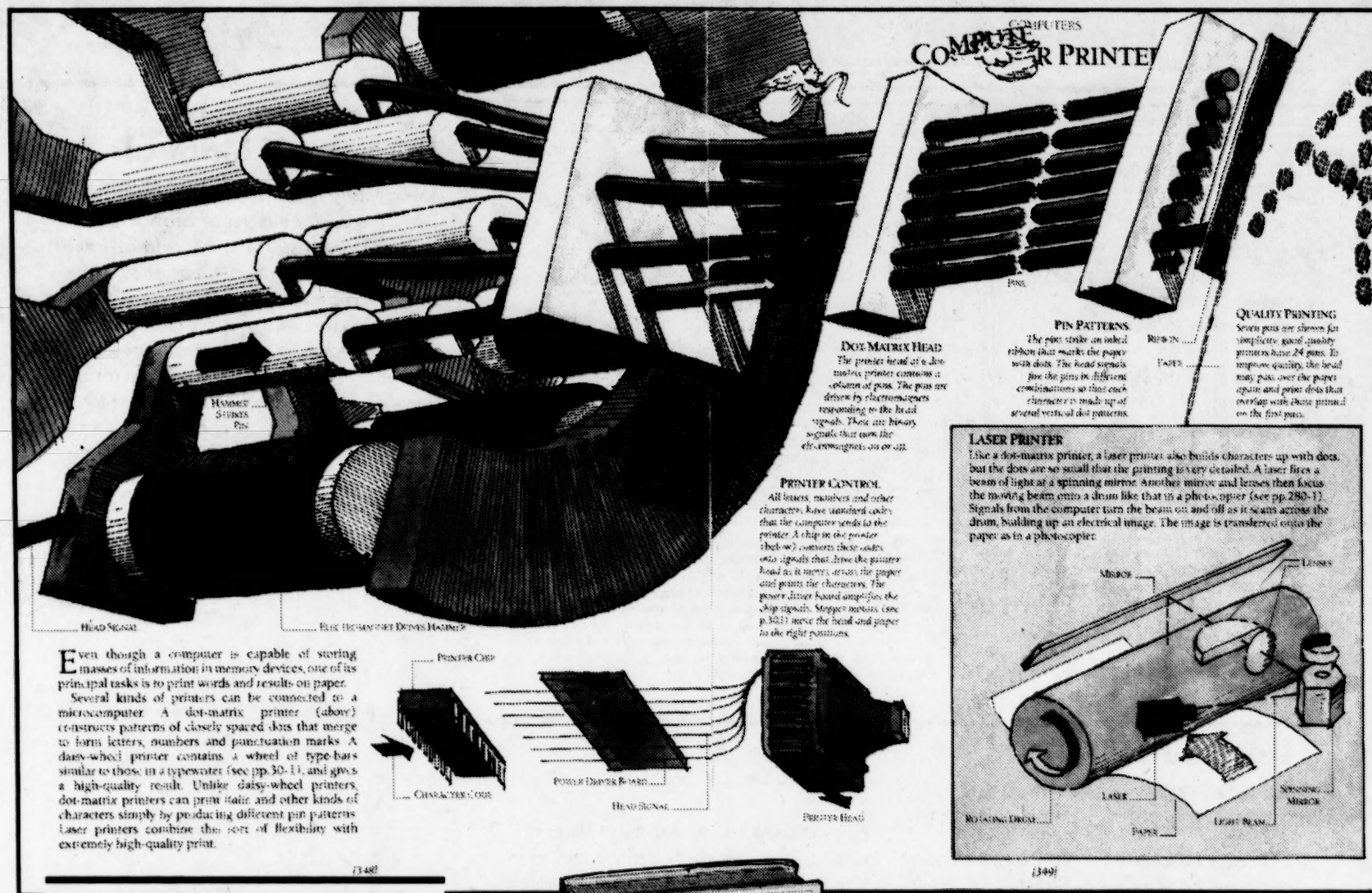
A new product, Boeshield T-9, is the best thing yet I've run across for keeping corrosion at bay. It's an all-purpose, moisture-displacing, penetrating spray that goes on very wet, but dries to leave a substantial and tough wax-based film. Sort of a combination of WD-40 and Ziebart. The stuff is clear, almost invisible in use, which lets you use it in a lot of places you ordinarily wouldn't use a rustproofer, like tools and machinery in a damp shop. I used it to touch up the rustproofing on my VW, then sprayed it on the aluminum engine parts, where it hardened to a glossy sheen that laughs at roadsalt. I'm going to spray my Gravely tractor next.

Boeing apparently developed it for aircraft use because they were dissatisfied with existing products; then, seeing the possibilities for a much larger general market, licensed the formula. Your best chance of finding some is at a boating store, but it is starting to turn up in hardware stores.

My only complaint with the stuff is that the sprayhead on the can puts out a wastefully solid stream. It would be nicer if you could fog the stuff on.

—Steven Lindblom

Boeshield T-9
$7.95/12-oz. can. (One source:) E & B Discount Marine/attn.: mail order, 201 Meadow Road, Edison, NJ 08818; 800/533-5007.



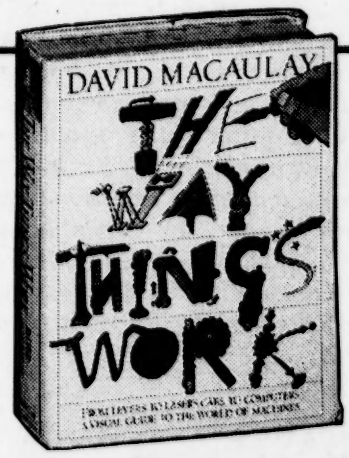
Even though a computer is capable of storing masses of information in memory devices, one of its principal tasks is to print words and results on paper.

Several kinds of printers can be connected to a microcomputer. A dot-matrix printer (above) constructs patterns of closely spaced dots that merge to form letters, numbers and punctuation marks. A daisy-wheel printer contains a wheel of type-bars similar to those in a typewriter (see pp.30-1), and gives a high-quality result. Unlike daisy-wheel printers, dot-matrix printers can print italic and other kinds of characters simply by producing different pin patterns. Laser printers combine this sort of flexibility with extremely high-quality print.

[348]

[349]

The Way Things Work

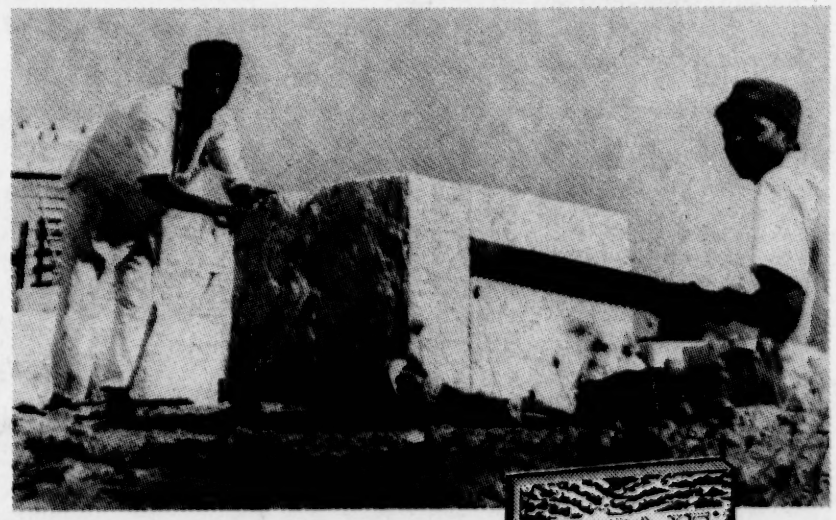


*Astounding drawings make this book accessible to many people who might otherwise be put off by technical explanations of how machines work. (If the drawing style looks familiar, it's because the author is famous for many other books graced by his talents; **Cathedral** is probably his best-known.) It's an effort to remove the jargon-ridden mystery from common-tech — everything from your bathroom scale to a computer's disk drive. Despite the drawings and the sly humor that pervades the text, you still have to think a bit, which is just as well. The book would have been spoilt if it had talked down to the reader. Suitable for kids and tech-ignorant people. —J. Baldwin*

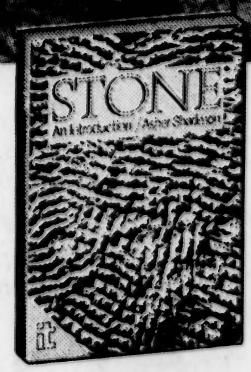
The Way Things Work
David Macaulay, 1988; 384 pp.
$29.95 postpaid from Houghton Mifflin Company/attn.: mail order dept., Wayside Road, Burlington, MA 01803; 800/225-3362 (or Whole Earth Access)

Stone

Ohboy, there's nothing like a book that shows you stuff that you just had no idea of before! Here's the story of building with stone; history, geology, mining, shaping, tools, building technique, all discussed (a tad dryly, it must be said) and illustrated with good drawings and photographs. I found the chapters on mining especially interesting — enough is shown to enable you to engage in a bit of stonecutting yourself. —J. Baldwin

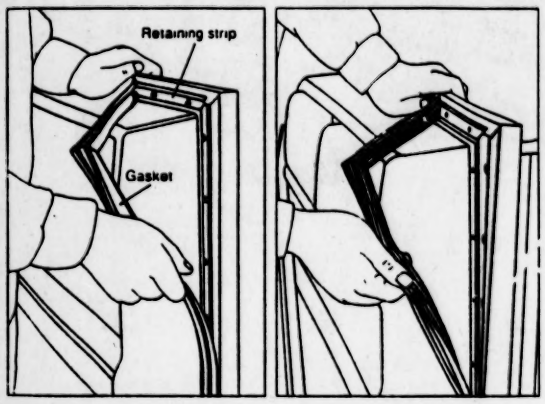


Sawing limestone into building blocks.



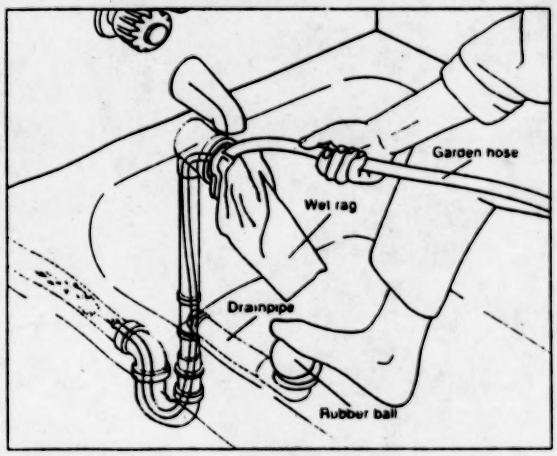
Stone
Asher Shadmon, 1989; 140 pp.
$15.95 ($18.45 postpaid) from Bootstrap Press, 777 United Nations Plaza/Suite 9A, New York, NY 10017; 212/972-9877.

REPLACING A DOOR GASKET



1 Removing the gasket. Before removing the old gasket, soak the new one in warm water to soften it and make installation easier. Unplug the refrigerator, pull back the gasket to expose the retaining strip and loosen the screws *(page 230)*. Try to pull out the gasket from behind the retaining strip. On newer models, it will come free *(above, left)*; on older models, the screws pass through holes in the gasket itself *(above, right)*. To free this type of gasket, remove the screws from the retaining strip along the top edge of the door and one-third of the way down each side. Pull the upper part of the gasket away from the retaining strip.

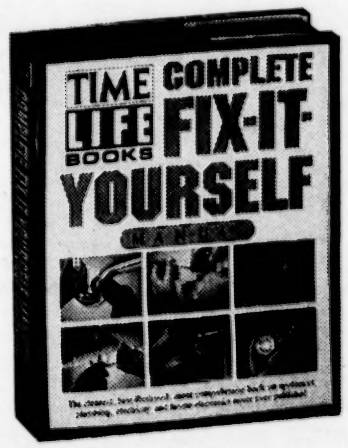
CLEARING A CLOGGED DRAIN



3 Using a hose. A hose attached to an outdoor faucet may reach the tub through a window. If not, attach the hose to an indoor faucet using a threaded adapter. Close all nearby drains, feed the hose down the overflow tube and pack rags tightly around the hose. (When the overflow tube is too narrow for the hose, feed the hose down the drain opening as far as possible.) Press down firmly on the plug or a rubber ball *(above)* to seal the tub drain. Hold the hose firmly while someone turns the water on full force and then off again several times to flush the blockage.

Complete Fix-It-Yourself Manual

We greatly liked this book when Time-Life offered it as a set of manuals, each on a different subject. Now in one big fatty, the information is easier to cross-reference and find. As before, it's up-to-date, extraordinarily well illustrated, non-intimidating and exceptionally useful. Matter of fact, I delved into it this very day and found exactly what I need to know to seal a neighbor's leaking washing machine. Would that all fix-it writing was this good. I prefer it over ***Reader's Digest****'s similar one (****EWEC*** *p. 129), our previously recommended one-volume fix-it book.* —J. Baldwin

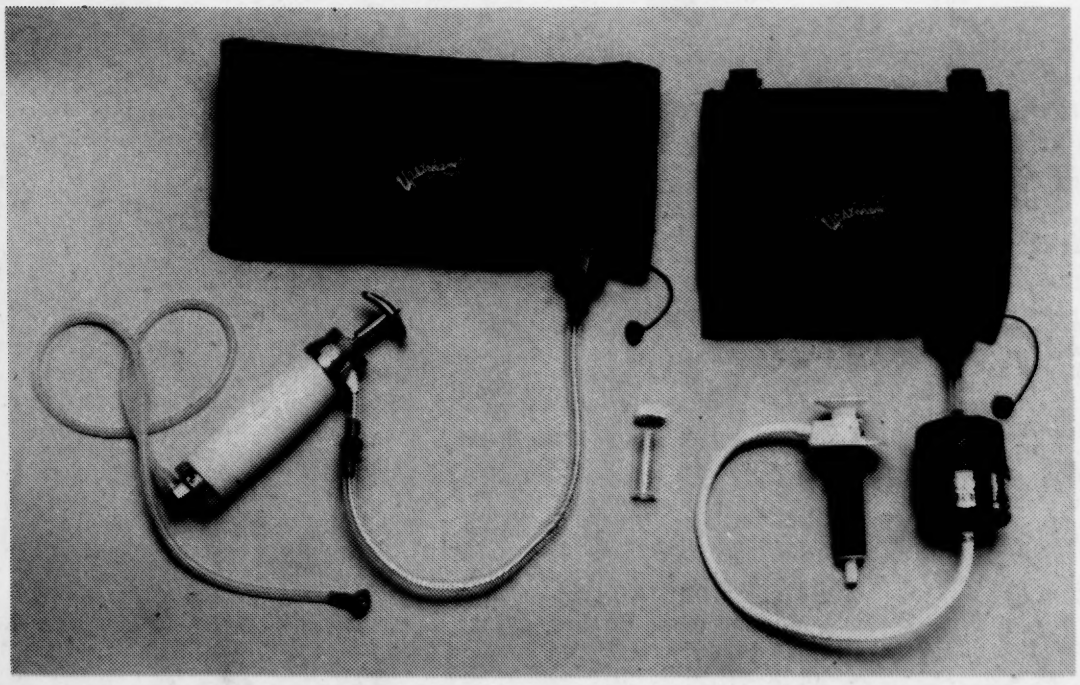


Complete Fix-It-Yourself Manual
Kenneth Winchester, Editor
1989; 448 pp.
$24.45 postpaid from Prentice Hall/attn.: mail order sales, 200 Old Tappan Road, Old Tappan, NJ 07675; 201/767-5937
(or Whole Earth Access).

Upstream Waistbelt Thermos

A fanny pack full of water, about two quarts, is what this is. No more flopping canteens on your belt. But the cap looks a bit odd, wonder why it's made like that? Well, for one thing, you can attach a hose to the lid, so you can slurp as you walk, ski or ride. And the hose will work the other way, as a filler. This enables you to easily fill the waterbag directly from a Katadyn ***(WER #62)*** *or other portable water filter, normally a job that takes three hands and a prehensile belly button to hold the filter and pump it into a tippy container. That cap will also fit other-side-up, acting as a loading funnel or — a boon in the sandy desert — with a squeeze on the bag it becomes an eye-rinsing cup. Is there no end to this display of egregious cleverness? Um, there's a shut-off device on the tip of the hose. Not only does it keep the water from leaking after a drink, it shuts off the shower; you can hang the bag from a branch for a quick rinse. (Yes, the bag will safely hold hot water too, making it a pretty good hot-water bottle for cold feet.) The thing is nicely made, is insulated, and has a cargo pouch alongside the waterbag liner. Also available as a two-quart shoulderbag/pack and as a five-quart heated seat cushion/handwarmer/foodwarmer/shower arrangement. It's a pleasure to see a product so well thought out.* —J. Baldwin

Upstream Waistbelt Thermos
$43.90 postpaid; flyer **free** from Upstream Products, 24991 Skyland Road, Los Gatos, CA 95030; 408/353-2348.



Dresser Fittings

Scorned by professional plumbers, and banned by many building codes, dresser fittings are nonetheless enjoying increasing popularity. Reason? They do the deed when alternatives are hassle beyond measure. What they do is join two unthreaded pipes — galvanized iron or plastic or both. That doesn't sound like much, but it is. Consider this situation: you pick-axe a hole in an underground plastic pipe feeding your garden faucet. An easy dig-up shows an unpatchable cut clear through. You saw the pipe ends clean on either side of the break. Then *what do you do? You can't add a tiny piece; how would you glue both ends at the same time? (Not to mention giving the still-wet glue joint the mandatory quarter-twist to prevent glue flaws.) To the rescue comes the dresser fitting:*

Grizzly Imports, Inc.

Beautiful power machinery, very reasonably priced. I have personal experience with the 10" table saw — lots of solid, smooth-working steel many hundreds of dollars below domestic plastic-lined junk. These power tools look and feel like equipment from the '30s and '40s, the golden age of machinery. Good values on blades, router bits and accessories, too. Fine service.
—John Benecki

The best of Taiwan-made machinery.
—J. Baldwin

Grizzly Imports
Catalog **free** from Grizzly Imports, Inc., P. O. Box 2069, Bellingham, WA 98277; 206/647-0801.

EXCLUSIVE TO GRIZZLY!—OUR TABLE HAS T-SLOTS FOR MITER GAUGE!

PRECISION GROUND TABLE-TOP & WINGS FOR A MIRROR-LIKE FINISH AND THE ULTIMATE IN ACCURACY!

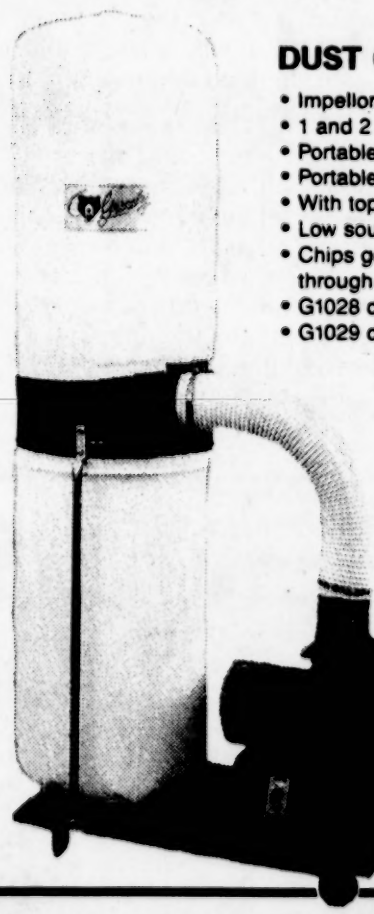
PACKAGE DEAL!

MODEL G1022 10" table saw complete with 1½ H.P. factory fitted motor, 2 cast iron extension wings, sturdy stand, metal blade-guard and 2 blade-inserts (one for the regular blade and one for dado set)

ONLY $365.00
F.O.B. Bellingham, WA or Williamsport, PA

FEATURES:

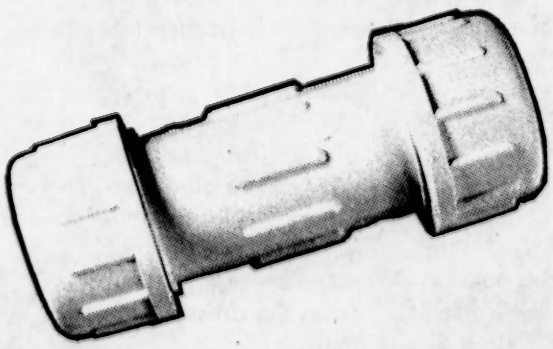
All ball-bearing arbor tilts using worm gear mechanism.
Quick lock fence locks both front and back when lever is pressed down.
Cast-iron table with heavy-duty cast iron extensions—not flimsy sheet metal wings.
Heavy-duty rip fence with micro-knob for fine adjustment.
Extra long tubes can be added for extremely large jobs.
Extra cast-iron extension wings can be added with above tubes.
Tubes are 1⅜" in diameter.



DUST COLLECTION SYSTEMS

- Impellors are radial-fin type and are mounted directly to motor shaft.
- 1 and 2 H.P. models are capable of handling 2 machines.
- Portable base on 1 and 2 H.P. model measures 20" × 35".
- Portable base on 3 H.P. measures 21" × 46".
- With top bags blown up machines stand 76" high.
- Low sound levels make them feasible for small shops.
- Chips get sucked in, whirl around in the top bag and fall through a funnel into the bottom bag.
- G1028 draws 12 amps at 110V.
- G1029 draws 10 amps at 220V or 20 amps at 110V.

No glue. Just slide it over one end of the broken pipe, then back over the other end, and tighten. Rubber rings provide the seals. This is THE answer for underground lines that are repeatedly breaking because of ground shifting, as on hills; the seals can accept considerable pipe motion without leaking. Available in many sizes in metal and ABS plastic, at your plumbing-supply store.
—J. Baldwin

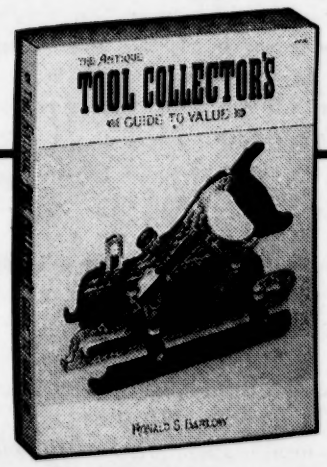


The Antique Tool Collector's Guide to Value

I personally do not have the slightest interest in collecting anything, much less tools, though I have no doubt that this book will serve those who do. What does interest me is the nifty old tools that ingeniously fulfilled needs long gone; a look at those implements tells much about the minds of their inventors and users. Also present and fascinating are tools that would still have utility if they were still made. Chain hardware stores only stock "popular" items, thus reducing the retail demand for the more esoteric and specialized stuff. The factory, of course, sees the decline in sales as lack of interest, and so terminates production. Too bad. This book and the collections it informs might help familiarize people with what they could have. Again. *—J. Baldwin*

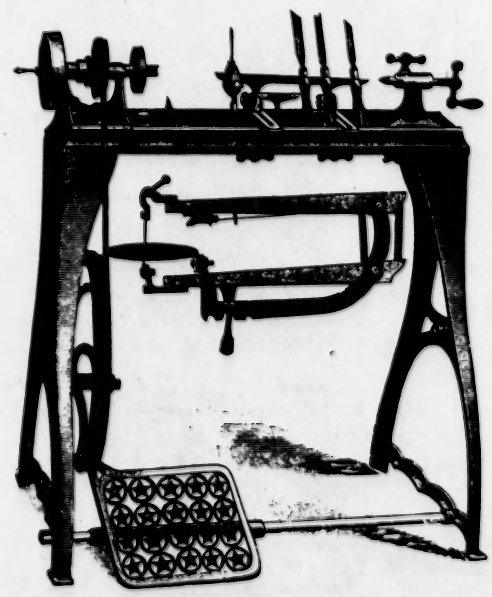
Stanley No. 28 cornering tool, used by pattern-makers and woodworkers to round off sharp corners. Sold for decades at 40 cents. Today's price range $10-$20.

This Stanley No. 96 plane-shaped Chisel Gauge was made to raise a shaving for blind nailing. It sold for 20 cents in 1907. Today's collector might pay $200.



The Antique Tool Collector's Guide to Value
Ronald S. Barlow, 1989; 236 pp.
$12.95 ($14.45 postpaid) from Windmill Publishing, 2147 Windmill View Road, El Cajon, CA 92020

Fancy, or Dancing Legs



This GOODELL Lathe & Jigsaw combination was designed by A.D. Goodell, a master mechanic at the Millers Falls Factory. It appears in an 1886 catalog priced at $10. A similar lathe & saw outfit named the COMPANION was manufactured by Millers Falls for the "Youths Companion Magazine". It was offered as a subscription premium to young salesmen. Both models were very popular overseas as well as in the United States. They remained a staple item in mail-order catalogs well into the 20th century.

Satellite Watch Newsletter

"Your source for the latest news from the satellite underground," blares the prominent subtitle. And it is. It's the hangout for video pirates. You'll find stuff about semi-illegal black boxes, magic chips, modified decoders — jargon for devices that backyard satellite-TV owners attach to their equipment to pick up or descramble signals. This newsletter casts TV-phreaking as patriotic First Amendment duty to the millions of frustrated backyarders hooked up in rural middle America. The publishers have videos for sale of how to install modified chips. Currently they are being held up by the FBI, who don't buy their reasoning that these are "for educational purposes only." Here is the outlaw side of this argument. —*Kevin Kelly*

•

Just a little solder . . .
People who purchased the VideoCipher decoder also discovered that by simply adding a wire from one point in the decoder and running it to another, the unit would descramble the video on all VC II encrypted services. This method was quite popular with early VC II owners, and although it still works, it is rarely used today. . . .

Over 1.5 million VideoCipher decoders have been sold to date, yet less than

Satellite Watch Newsletter
Bill Myers, Editor. **$29.95**/year (12 issues) from Group M, Inc., 100 Bridge Street, #27, Hot Springs, AR 71901; 501/321-1845.

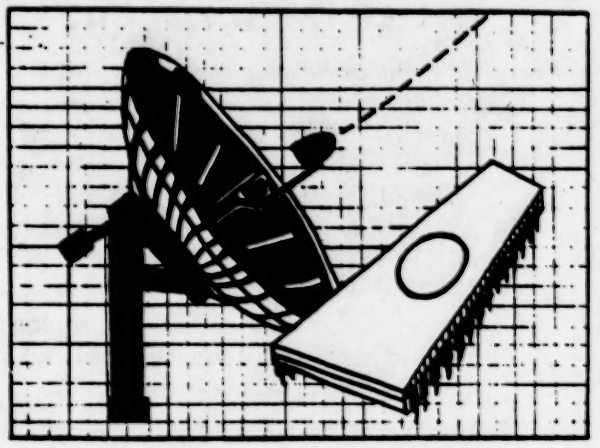
400,000 of these units have been authorized to receive any programming. There is little doubt that the security of VC II has been compromised by a public that is unwilling to accept an ill thought-out scrambling system forced on them by greedy corporation and a unresponsive government.

•

The engineers went to work [in late 1987] and after many thousands of man hours came up with a replacement device that was thought to be more secure than any decoder ever released to the consumer market.

Yet, even after all their efforts, within weeks of the release of the newest decoder, the 032 'fix' was available on

INQUIRING MINDS WANT TO KNOW



the street for $40,000. And there were buyers — at least one person purchased the software in the middle of January. The deal went down in Canada, with both parties involved flying out of the U.S. to meet in neutral territory. The product was shown, it apparently worked, and $40,000 cash changed hands.

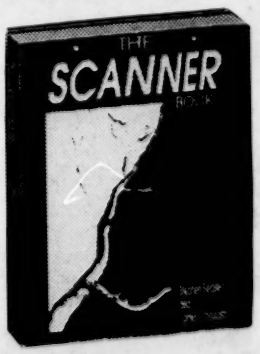
Within hours, the software was back in the United States, and being offered to other hackers for $12,000. Several copies of the software sold at this price. Within a few days, the price of the software dropped to $1,200 where it remained for almost a month. By late February, the price had dropped to under $400, being offered at that price by as many as 1,000 different dealers across the country.

The Scanner Book

Scanners are computer peripherals that capture images (including words) and convert them into computer fodder. In a slightly more evolved form they will be used to make completely electronic publications — ones in which high-resolution pictures, along with text, can be shuffled around, shrunk or enlarged, sent over wires, stored on disks, or printed out on paper. We used a scanner a lot to produce the ***Electronic Whole Earth Catalog****. This book, the first such one on the subject, does a pretty good job of guiding you through the art of mastering the primitive scanners now available.* —*Kevin Kelly*

The Scanner Book
Stephen Beale and James Cavuoto
1989; 220 pp.

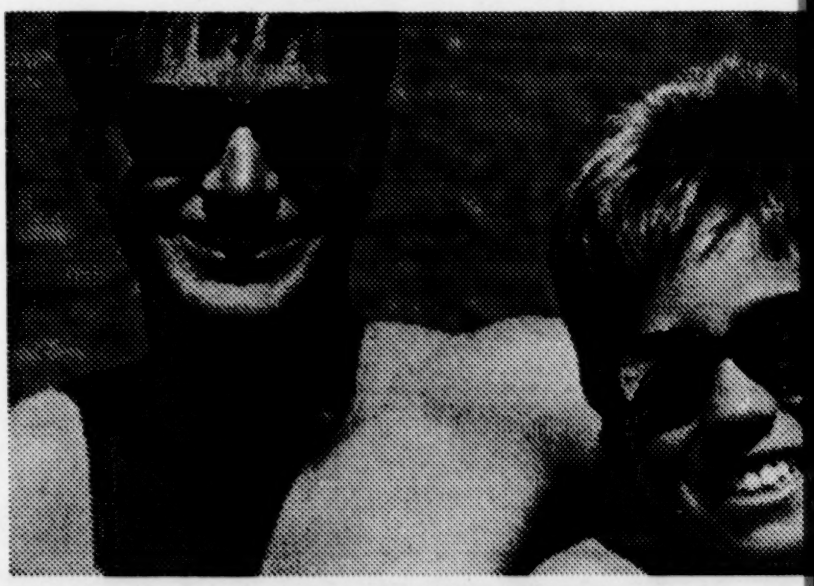
$22.95 ($24.95 postpaid) from MicroPublishing Report, 21150 Hawthorne Blvd./Suite 104, Torrance, CA 90503; 213/371-5787



(or Whole Earth Access).

•

The major disadvantage of saving gray scale information is that it eats up a lot of disk storage. A full-page, 300-dpi image scanned at one bit per pixel consumes more than a megabyte of file space. The same image scanned at eight bits per pixel consumes more than eight megabytes, though you can reduce this by scanning at a lower resolution, as we'll see later. Since most hard disks have capacities ranging from 20 to 80 megabytes, just a few full-page halftones could easily fill one up.



The image on top was produced on a 300-dpi laser printer. The image on the bottom was produced with a Linotronic typesetter.

John's Picks

Computer programmer John Z's picks are my picks, too, if I had to choose the best bunch of books in the hippest fields of digital research — the overlapping borders of software architecture, electronic music, computer graphics, and chaos theory. A wonderful mail-order catalog of understanding's edge.

— Kevin Kelly

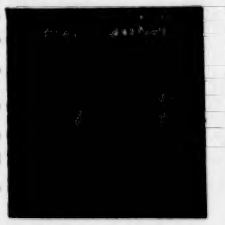
[Suggested by Roger Knights]

John's Picks

$3 from Microcomputer Applications, P. O. Box E, Suisun City, CA 94585; 707/422-1465.

Building Alternate Realities. This is much more than simply a book on mathematical modeling—it's more like a philosophy of modeling. Just as different languages give rise to different concepts (e.g., Eskimos have 20 or more words for snow), different modeling techniques yield alternate realities.

And, since no one yet understands the ultimate reality of the world, the key in modeling is to select the best modeling techniques for your application. This book guides you through the *ways of modelmaking* to show you how to determine whether a model is "good" or "bad."



The author covers natural systems and formal mathematical models, cellular automata and discrete dynamics, catastrophe theory, life, chaos, bifurcations, Poincare maps, competition, and adaptation.

Hardback Cat# 62-5 $36.95

Zone VI

The Zone VI Catalog is easy to review. They make some of the best photographic equipment in the world, they guarantee it all unconditionally, and they're great people to deal with.

Their archival print washer and cold light enlargers are the standard for photographers out after the perfect print. They offer a 4x5 wooden field camera whose specifications are enough to make one drool. And they guarantee it for life.

*The proprietor, Fred Picker, dispenses photographic wisdom in the **Zone VI Newsletter**, which is well worth a subscription. Between Picker's books and the newsletters I was able to make major improvements in the photographs I've been taking.*

These are people who are excited about photography, and who offer the tools and techniques needed to make the best prints one is capable of. I'd love to go to one of their summer workshops!

—Charles Spurgeon

•

I know that a three hour session is it for me if I'm doing demanding work. After three hours I can still do routine darkroom chores but I won't print well. After a printing session I develop negatives, mix chemicals, tone prints, proof negatives, file, and clean up. I like to print early in the day. People who head for the darkroom after a big dinner, which might have included a little wine or beer, and print until 3:00 a.m., don't print very well. —Zone VI Newsletter

•

Our Viewing Filters perform three essential functions in visualizing the final print: (1) they modify the colors in a natural scene to shades of gray as they will appear in the black and white photograph, (2) they indicate whether filters are necessary to avoid "mergers," (3) they enable you to compose the photograph in the camera format you use.

The basis of the Black & White Viewing Filters is a delicate amber monochromatic gel — a series 90 wratten filter, which we mount in clear glass and encase in a 3" diameter black matte frame. Each comes with a neck strap for easy accessibility. —Zone VI Catalog

Zone VI

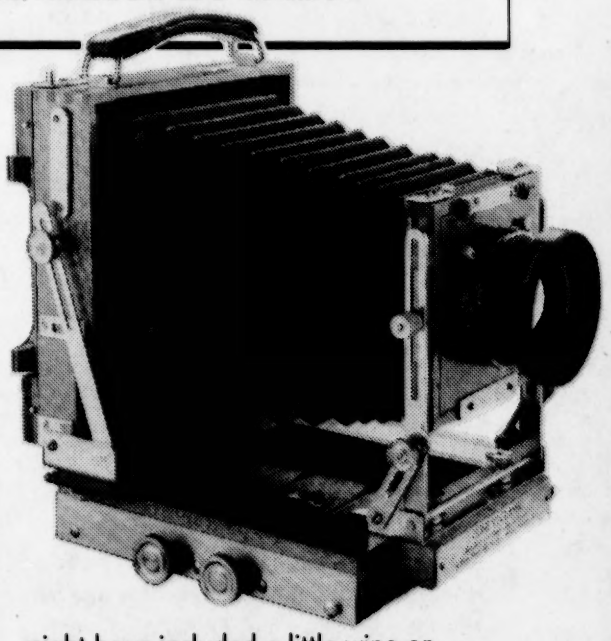
Catalog **free;**

Zone VI Newsletter

Fred Picker, Editor

$19/3 years (4 issues)

Both from:
Zone VI Studios Inc., Newfane, VT 05345-0219; 802/257-5161.



Poetry on Tape

Poetry the way it was meant to be inhaled — through the ears. —Kevin Kelly

Poetry on Tape

Catalog **free** from Poets' Audio Center, P. O. Box 50145, Washington, DC 20004-0145; 202/722-9106.

Sylvia Plath — *Plath.* An historic recording made in late October, 1962 — probably the most prolific month of the poet's life. Includes readings of 15 poems including "Ariel," "Daddy," and "Lady Lazarus." Also an interview with Peter Orr of the BBC. Credo. 48 minutes.

Order No. C-1871 — $12.95

Adrienne Rich — *Planetarium: A Retrospective 1950-1980.* A priceless selection of work, tracing each book up to 1980, including such poems as "Diving Into the Wreck," "Necessities of Life" and "Hunger." Watershed studio recording, 1986. 63 minutes. Dolby.

Order No. C-1201 — $9.95

Words on Tape

*This directory of audio cassettes is superior to **On Cassette**, the directory we recommended previously. It costs less, too. In it I've found just about every title I've been looking for, even very obscure ones. For instance, I wanted to hear tapes of the Trappist monk Thomas Merton speaking in his own voice after I listened to his autobiography on tape (read by someone else). This directory listed the small Catholic publisher that had them.* *—Kevin Kelly*

Words on Tape

Ardis Voegelin-Carleton, Editor
1989; 582 pp.

$34.95 postpaid from Meckler Publishing, 11 Ferry Lane West, Westport, CT 06880; 203/226-6967.

Goodbye to Berlin and Other Stories. Isherwood, Christopher. Read by Isherwood, Christopher. 1 cass. 60 min. $12.95 purchase. SWC 1752. Caedmon.

Goodnight Moon. Brown, Margaret Wise. Notes: $12.95 with paperback book. (1 cass.). $9.95 purchase. 0-941078-28-0. Live Oak Media.

Goody's Last Stand. Alverson, Charles. Read by Muller, Frank. (4 cass.). 360 min. $24.95 purchase. $9.95 rental. 81050. Recorded Books Inc.

Goon Show Classics. Notes: The laughing stock of the BBC-classic comedy shows from five decades. 2 cass. £5.99 purchase. 225432. BBC Enterprises Ltd.

Goon Show Classics, 2. Notes: Laughing stock of the BBC-classic comedy shows from five decades. 2 cass. £5.99 purchase. 225440. BBC Enterprises Ltd.

The Goon Show: Forog. Read by Sellers, Peter. Includes: The Last Tram. Notes: BBC Comedy. 23 Nov and 22 Dec 1954. (1 cass.). 60 min. $6.00 purchase. C-117. Golden Age Radio.

The Goose Girl *see* Let's Pretend.

Goose Girl *see* The Seventh Princess and Other Fairy Tales.

Goose That Laid the Golden Egg *see* Listening Appreciation: Aesop's Fables: Vol. II.

Gopher in the Garden *see* People, Animals and Other Monsters.

HELLO, CENTRAL

Phone Conferencing Tips

BY LOUIS JAFFE

MOST PEOPLE HAVE HEARD the term "conference call" and know it means a group phone call. Several participants in different places, connected simultaneously, can hear and converse with each other. Few of us have been in a conference call, however. Fewer still know that it's one of the most powerful, easiest to use, and least expensive communication tools, well within the means of briarpatch businesses, public-interest groups, and even families.

(The terms "audioconference" and "audio teleconference" are synonymous with "conference call" and I will use them interchangeably.)

Although it's been around for years, conference calling isn't a highly visible industry. Say "teleconference," and most people think video — yet two-way video is still technically difficult and prohibitively expensive. Audio is the workhorse — simple, cost-effective, and usage is exploding. Ordinary telephones work fine, and a conference call can include any phone anywhere in the world. Some calls are for as few as 3 to 5 people, but the typical group size is 12 to 16. Occasionally hundreds of people may be on one call.

How can 16 people, let alone a hundred, talk together on one phone call? With groups up to about 16, it's really no problem. You can converse pretty much as you would in an in-person meeting and not worry about it — you'll seldom have more than one person speaking at a time. The interconnect equipment (called a bridge, because it bridges together multiple lines) is set up to minimize background noise. It does this by transmitting the voices of only the one or two people who're actually speaking, while keeping the rest of the group in a listen-only mode. When a new person starts talking, the bridge instantly raises that line to full volume and fades back the person who just quit talking. Without this technique, the cumulative background noise of all the rooms people are calling from would be overwhelming.

To handle larger groups you need a more formal protocol: a moderator who calls on people to speak in turn, and a method for those who want to speak to be recognized. *Robert's Rules of Order* works surprisingly well.

A typical conference call, the monthly board-of-directors' meeting, goes something like this:

At 6 PM Pacific time, from the desk in my study in San Francisco, I dial an 800 number and am answered by a brief recorded message: "Welcome. Please stay on the line. Your conference will begin shortly." Hold music comes on.

At about the same moment — 8 PM central time — others are calling the same number: Bob, our chairman, Jenny, the comptroller, Alan and Richard, the other two regular board members. Richard is on the road this night, expected to call from Houston.

After a half a minute the music stops, and I can hear the three people who've already called in. Bob and Jenny are at home in Kansas. Alan is phoning from his lakeside summer cottage somewhere in Missouri. They're discussing the weather, the kids — typical pre-meeting small talk. We hear a short electronic beep, signaling that someone else has been connected.

Bob: "Hello, who's just joined us?"

"Hi, Bob, this is Richard. The plane was late, of course — I just made it to the hotel."

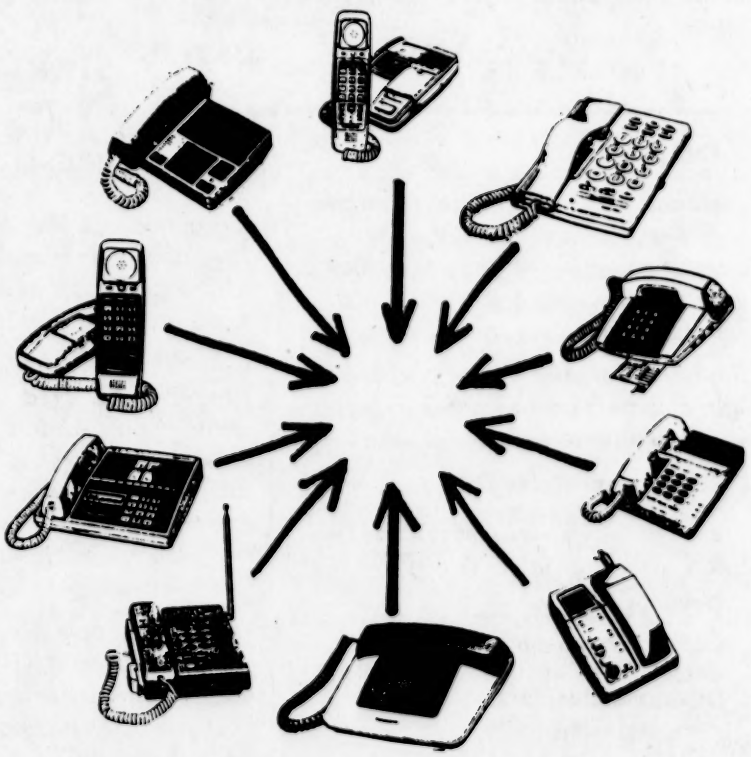
"Hi Dick. Okay, everyone's here, let's call it to order."

For the next hour and a half, business is conducted as at any board meeting. Motions are taken and votes recorded following Robert's rules of order. An occasional joke or aside keeps the proceedings from becoming deadly. Forty-five minutes in, I'm getting cauliflower ear and a crick in my neck. I switch on my speakerphone and hang up the receiver, so I can listen and talk hands-free. At an hour and twenty minutes the meeting begins to wind down.

Bob: "Anyone have anything else?"

Everyone: "Nothing at my end. That's all I have," etc. Bob: "Guess that's it. Thanks everybody. G'night."

A week later my director's-fee check comes in the mail.



Meet-me-bridge call. Callers dial into an automatic switching area that has been reserved for their use. No operator is required.

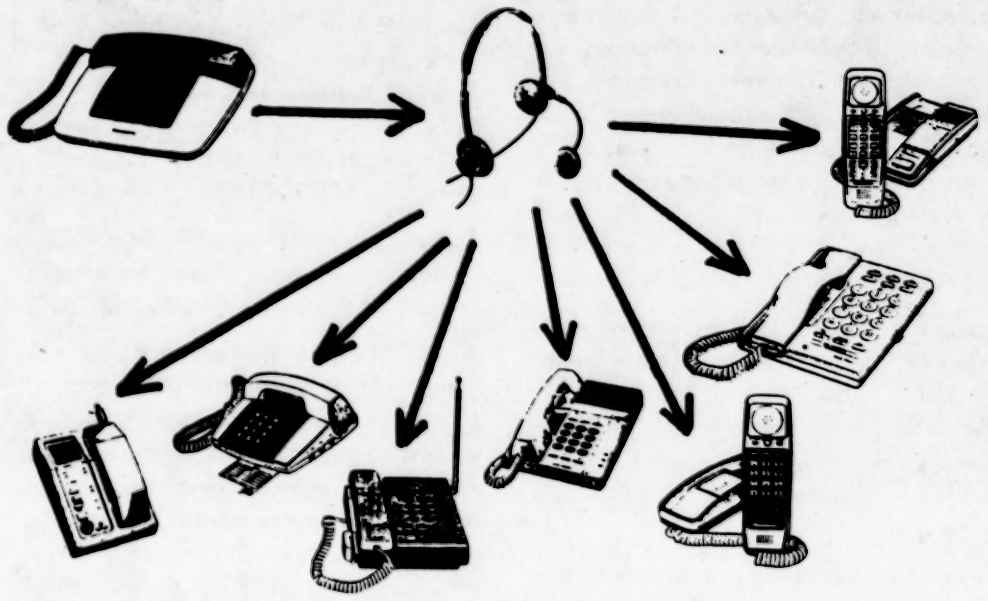
Kevin Kelly

In almost any profession I can think of, the most underrated tool is the telephone. Cheap, fast, dependable, universal, and incredibly productive. And it has hidden talent, outlined here. It's taken two pioneers in computer conferencing to remind me of the underutilized virtues of telephone conferences. Larry Brilliant, co-founder of the WELL, moved into computer conferencing after using telephone conferences almost daily for years. He referred all my questions about telephone nets to Louis Jaffe, who moved in the opposite direction, from co-launching Chariot (the Colorado computer conferencing system closest to the WELL in atmosphere and structure) into audio-conferencing as the most effective populist network. He now works with a teleconferencing service from San Francisco. *Kevin Kelly*

This board meeting was a typical no-frills, small-group conference call. Five of us met for an hour and 20 minutes. The total cost was about $125, of which something over half went to the teleconferencing company for access to its "bridge"; the rest went for ordinary long-distance calls from our phones to the bridge, a procedure known as a "meet-me conference." Travel to an in-person meeting would typically have cost four to ten times as much.

Above this minimal level of service you have operator assistance, which is still the most popular type of conference call. Either the operator places a call to each participant (operator-assisted dial-out), or participants phone in and the operator greets them (operator-assisted dial-in).

Meeting by phone is a lot easier for me than flying from San Francisco to our head office in Kansas City every month, and it saves the company a lot of money. On the other hand, at least twice a year I do fly to K.C., and we all converge at a private dining room in a hotel to have dinner followed by the meeting. Our occasional face-to-face meetings give us a chance to party and relax together, to keep faces attached to voices. Between the in-person get-togethers, we meet half a dozen times by phone, doing probably 80 percent of our routine business with greatly reduced hassle, time, and expense. It would be a drag, after all, if we never saw each other. The operative principle seems to be: Alternate in-person meetings with tele-meetings. As a rule of thumb, a ratio of one in-person session to every four teleconferences is often workable.



Operator-managed audioconference call. Initiated by one caller, the operator rings each member and adds them to the meeting.

WHAT'S IT GOOD FOR?

Amazing things have been taught by phone, including master classes of cello and piano technique. Executives attend tele-seminars without leaving their desks; the guest lecturer may be anywhere in the world. Support groups use teleconferences for mutual self-help on a vast range of topics.

Disasters and crises touch off urgent teleconferences, with people calling in from phonebooths, cars, planes and boats, tropical resorts, wherever the bad news catches them.

Press conferences are staged by conference call instead of in a banquet room. Costs are reduced an order of magnitude compared to an in-person event, yet attendance may actually be higher — reporters can participate without leaving their desks. For smaller companies or public-interest groups struggling to get their message out, this factor can make the difference between coverage and no coverage.

The vast majority of teleconferences are simply routine business meetings. Most are done by commercial companies, either as motivation-builders — often for salespeople in the field — or to tackle operational problems. Nonprofit and self-help groups may have different goals, but their communication needs are much the same: motivation and management.

Teleconferencing means freedom to hold meetings in response to events, unhampered by worries of who's where. It offers a new power to organize over distance, for either special events or ongoing work, and added leverage for scarce operating funds.

I've seen audioconferencing successfully used by rural healthcare workers, medical grant award committees, a single-parent support group, a fairness-in-media organization, ecology action groups, boards of directors of schools and colleges, alumni committees, and a college athletic association. If you're involved with activities of this type and are not audioconferencing regularly, you probably should be.

DIFFERENT FLAVORS

Conference-call service providers are a little like restaurants: Some have white tablecloths, a home-like atmosphere and an attentive staff; others make you carry your own tray, line up at the hot table, and sit at bare formica.

The difference between conference-call companies is the user support they provide. Besides bridging phone lines, what are they doing for you? As a teleconference user you have four general levels of support to consider:

• *LOW.* By prearrangement with a service provider, callers dial into a bridge that has been reserved for their use. Calls are automatically answered and interconnected. Usually the lowest-cost form of service, this is called a "meet-me" conference.

• *MEDIUM.* The operator's role is similar to that played in a person-to-person call. There is no effort to establish an ongoing relationship with the user: each transaction starts from scratch. Immediately prior to the call, the organizer of this teleconference gives the operator names and numbers of persons participating. The operator calls each person in turn, putting everyone on hold till the group is complete, conducts brief roll call, and leaves the call. No extended services, such as audiotaping, are available. Suitable only for smaller groups; as the number of participants mounts, the process of calling each person in turn while everyone else holds for the start of the conference becomes too time-consuming.

• *HIGH.* The teleconferencing company gives regular users a service representative with whom they can deal on a continuing basis, and will keep user participant lists for calls on file, so they don't have to be resubmitted for every call. If requested, operators monitor the entire conference, immediately call back anyone who's accidently disconnected, and perform other services like audiotaping the proceedings and sending copies to participants.

• *CUSTOM.* The service provider consults

extensively with the client to plan a special event, such as a tele-press conference. Advanced technical arrangements may include telephone-to-radio broadcast hookups, satellite video with conference-call audio, or 900-area-code pay-per-dialup events. The telephone operator is often replaced by a professional announcer acting as master-of-ceremonies.

HOW MUCH DOES IT COST?

A ballpark figure for bridging with operator assistance is about $15 per hour per person, to which are added the long distance (LD) charges to dial from each site to the bridge. Typically the minimum bridging fee is for 20 minutes, with charges above that pro-rated to the nearest minute.

During the business day (the maximum-rate period) calling between almost any two points in the U.S. runs about $15 per hour. Thus, for a weekday conference call, you're looking at $15 for bridging plus $15 for LD, or $30 per hour per person. To find the total group cost we multiply this figure by the number of participants, and find that a group of five people scattered around the country can talk for one hour for $150; a group of fifteen would pay $450.

There are few breaks on bridging fees, but evening and weekend calls will get you the typical 40 percent and 60 percent discounts off long-distance tolls, bringing the total cost down to about $21 per hour per person, or just over $100 per hour for five people. You often pay less for long-distance if you dial in to the bridge than if the conference-call service calls you. Calling in, you use the carrier of your choice (MCI, Sprint, etc.), and are billed directly (for the long distance, but not for the bridging) by the carrier. If instead you are called from the bridge, the conference-call service at their option may mark up the LD. Practices and markups vary. You can profit by doing your own rate comparisons and questioning service providers closely.

Although they could save money by dialing in rather than having the service company dial them, many users still prefer to be called. For one thing, attendance figures are often higher if the participants don't all have to remember to dial a certain number at a certain time. For another, the long-distance charges all go on one itemized statement instead of being billed back to each participant. Due to fragmentation in the telecom industry, it often costs twice as much to call a town within your area code, just 50 miles away, as it does to call thousands of miles across the country. Conference calling can be a big timesaver for local groups, but the current illogical rate structure makes it somewhat less cost-effective for them.

WHERE TO GO FOR SERVICE

American Teleconferencing Services (ATS), Overland Park, Kansas. I am part-owner of this company. We do all kinds of audioconferences, from very small to very large. We have our own switching center and operators, tied into the phone network. Call 800/776-0700.

Darome Teleconferencing Services. Our competitor. Try both of us — we each do things a bit differently. Call 800/327-6631.

AT&T. They have two conference-call arms, completely independent of one another. One is the operator-controlled conferencing that's been around for ages; the other, Alliance, uses newer computer-based hardware. Alliance has somewhat better audio quality and more flexible service options, and also costs more. AT&T doesn't provide the same level of personal service as some, but they do stand ready to handle any and all comers at short notice, 24 hours a day. Probably best for a quickie, generic conference call. Call 800/225-0233 to get an AT&T conferencing center. AT&T Alliance is 800/544-6363.

DO-IT-YOURSELF TELECONFERENCING

There are ways to put together your own small-scale conference calls without paying bridging fees.

- **Three-way service from local phone company.** Part of the enhanced-service spectrum that also includes call-waiting and call-forwarding, three-way enables you to call one party, put them on hold by depressing the switch hook, call another party, then confer with both. Only a conventional single-line phone is needed. The service costs around $3.50 a month.

- **2-line phone set** with conference feature. If you have two phone lines into your home or office, you can buy a phone set that will do a conference between parties on both lines, plus yourself. It's even theoretically possible to do a three-way call on each line, then bridge them in your phone set for a five-party call. Radio Shack recently had a two-line phone with conferencing on sale for $69.95. The electronics in cheap phones don't do as good a job as professional teleconferencing bridges, however.

- **PBX** with conferencing capability. PBXs (multi-line switching units for offices) often have the built-in capability to conference three or more lines. These capabilities usually go unused, because they require some technical sophistication to operate. It's easier to call a service and say "do it." Nevertheless, the potential is there in many office switchboards. ■

Tap into a worldwide network built on controlled anarchy & nearly free access

Trying to explain Usenet is like trying to paint a fart. Part of the trouble is that Usenet is a decentralized, ad hoc invention that is beyond any individual person's knowledge, and it changes daily. Further difficulties arise when you believe that it is also The Future.

Start with: it's a teleconferencing system where everyone types in messages using their personal computers. The comments are sent to volunteering main-frame computers and distributed worldwide to "mailing lists" of subscribers. What the subscribing users get each day are electronically distributed journals made up of letters, announcements, and (generally) short articles on a particular subject. Sometimes there is an editor (moderator), but usually there is not — part of the anarchistic tendency.

I get mail from folks all over the country, sent to me via Usenet through the WELL. It's just about the only kind of mail I will answer, because it is so convenient to do so. I can send mail to almost any technically oriented professional, and it is likely to be the only mail he/she will answer. (You'll notice long gibberish-looking Usenet addresses with many !s and @s within them appearing on people's business cards now.) Together, the WELL and Usenet have superceded any printed publication as the single source yielding the most tips, leads, and pointers to stuff that eventually appears in Whole Earth Review.

Robert Horvitz, who telecommunes with us through the WELL from Washington, DC, has become an expert explorer of Usenet, primarily through self-education. I found it much easier — in fact essential — to have a Usenet veteran at my side to guide me through the labyrinth of commands and Sphinx-like riddles demanding the proper keystrokes to get in. Anyway you go, it ain't designed to be easy. Despite — or because — of that, the Usenet community has attracted a remarkable subset of helpful and extremely informative citizens. —Kevin Kelly

The Usenet Underground

BY ROBERT HORVITZ

THOSE WHO KNOW USENET generally describe it with enthusiasm or exasperation — often both. It is the motherlode of noncommercial electronic information — a service, spawned by hackers, that has grown to Amazonian dimensions in a decade. Still growing rapidly, Usenet is already indispensable for academics, researchers and people in technical professions, and it's gradually becoming accessible to the general public.

Brief glimpses of its burgeoning role have already appeared in the mass media. Chinese students in North America used it to organize support for the pro-democracy movement back home. Scientists turned to it for hot news about "cold fusion" and new superconductive materials. The virulent software infection unleashed by Robert Morris, Jr., made headlines in 1988 by clogging it up for a few days. (The untold story there is that the antidote was also distributed through Usenet. Systems that went offline to "protect" themselves had a harder time recovering.)

Usenet is an information cooperative. There is no owner, no control center, no membership fees. It's not even an organization, really. Each Usenet site has someone designated as the administrator, and there is a "backbone cabal" of senior administrators who act as Usenet's custodians. But that's about it, in terms of human bureaucracy.

Within that minimal framework, some 16,000 sites are now linked by phone lines and data circuits to distribute about 3,000 articles, announcements, queries, polemics, reports and comments each day on every conceivable subject. An estimated 580,000 people have regular access to Usenet through local site computers — twice as many as two years ago, ten times as many as six years ago.

What holds this sprawling subculture together is a few basic agreements on message-heading formats, network addresses and software compatibility; the "netnews" software all sites have for managing the deluge of articles; a shared commitment to the free flow of ideas and knowledge; the willingness of some site sponsors to bear the cost of relaying messages for others; and, most importantly, the time and effort users donate in putting good stuff online. For in the end it's the content which attracts. In terms of quantity and quality, in most subject areas, Usenet is hard to beat.

The vast majority of Usenet sites are in North America, with beachheads in Europe, Asia and Australia. Begun in 1979-80 as a user-run service for student programmers working with UNIX (an operating system for computers), most of the early sites were on college campuses, and most of the messages concerned computing. The volume was small enough that the communication costs went unnoticed in departmental phone bills.

Today, the message traffic is so large that communications costs and staff time are big budget items, particularly at "backbone" sites, where articles and electronic mail converge for forwarding. No one really knows what the total cost of Usenet service is. Each site handles its own financing, and arrangements between sites are negotiated privately. Individual users at most institutionally sponsored sites pay nothing for access. However, the real total cost must run into millions of dollars per year.

Usenet sites today are typically colleges, research centers, high-tech corporations and public agencies. A growing number of non-institutional dial-in points give or sell public access (see list to follow). Computer topics and programming still account for about 40 percent of the postings. But other interests have rapidly expanding support — especially social and political discussions, science, and recreation.

How do Usenetters slog through 3,000 articles a day? They don't. Articles are posted to "newsgroups," which are like continually updated topical magazines that any site can arrange to get. Some newsgroups have "moderators" (editors) who do all the posting. Most do not. Anyone on Usenet can post an article to a unmoderated newsgroup, and within a few days it will propagate to every site subscribing to that newsgroup. Or, the poster can put geographic limits on distribution (only the San Francisco Bay area, just Canada, etc.).

There are currently about 600 newsgroups, covering everything from backpacking to microbiology, feminism to Fortran. Here are some particularly interesting, useful, and/or popular ones:

alt.activism Discussions among political activists
alt.bbs About BBS systems & software
alt.sex Postings of a prurient nature
comp.ai.digest Discussion of artificial intelligence
comp.dcom.telecom "Telecom Digest" (moderated), about telephony
comp.newprod Announcements of new computer products
comp.risks Risks to the public from computers & users
comp.sources.mac Software for the Apple Macintosh
comp.sys.ibm.pc Discussion of IBM personal computers & compatibles
comp.virus Computer viruses & system security
misc.forsale Short postings about items for sale
misc.jobs.offered Announcements of positions available
misc.headlines.unitex Articles from the UN Information Transfer Exchange
pubnet.nixpub Lists of public access UNIX/Usenet sites
rec.bicycles Bicycles, related products and laws
rec.music.gdead Discussion group for (Grateful) Dead-heads
rec.arts.tv About television programs, past and present
sci.energy The science & technology of energy
sci.environment Discussions about the environment, ecology
sci.nanotech Molecular-scale machines
sci.space Space programs and related research
soc.culture.china About China and Chinese culture
soc.singles Single people and their activities
talk.politics.mideast Discussion of Middle Eastern events
talk.politics.misc Political discussions and polemics of all kinds
talk.politics.soviet Discussion of Soviet politics, domestic and foreign

Anyone can suggest a new newsgroup. But to be added to the "mainstream distribution

mechanism," it must be approved by a margin of at least 100 votes in an electronic referendum open to all Usenetters, after a discussion period. The rules are somewhat looser for starting newsgroups with "alt." in the name. This prefix refers to an "alternative hierarchy" whose distribution isn't as well-sponsored as the mainstream's.

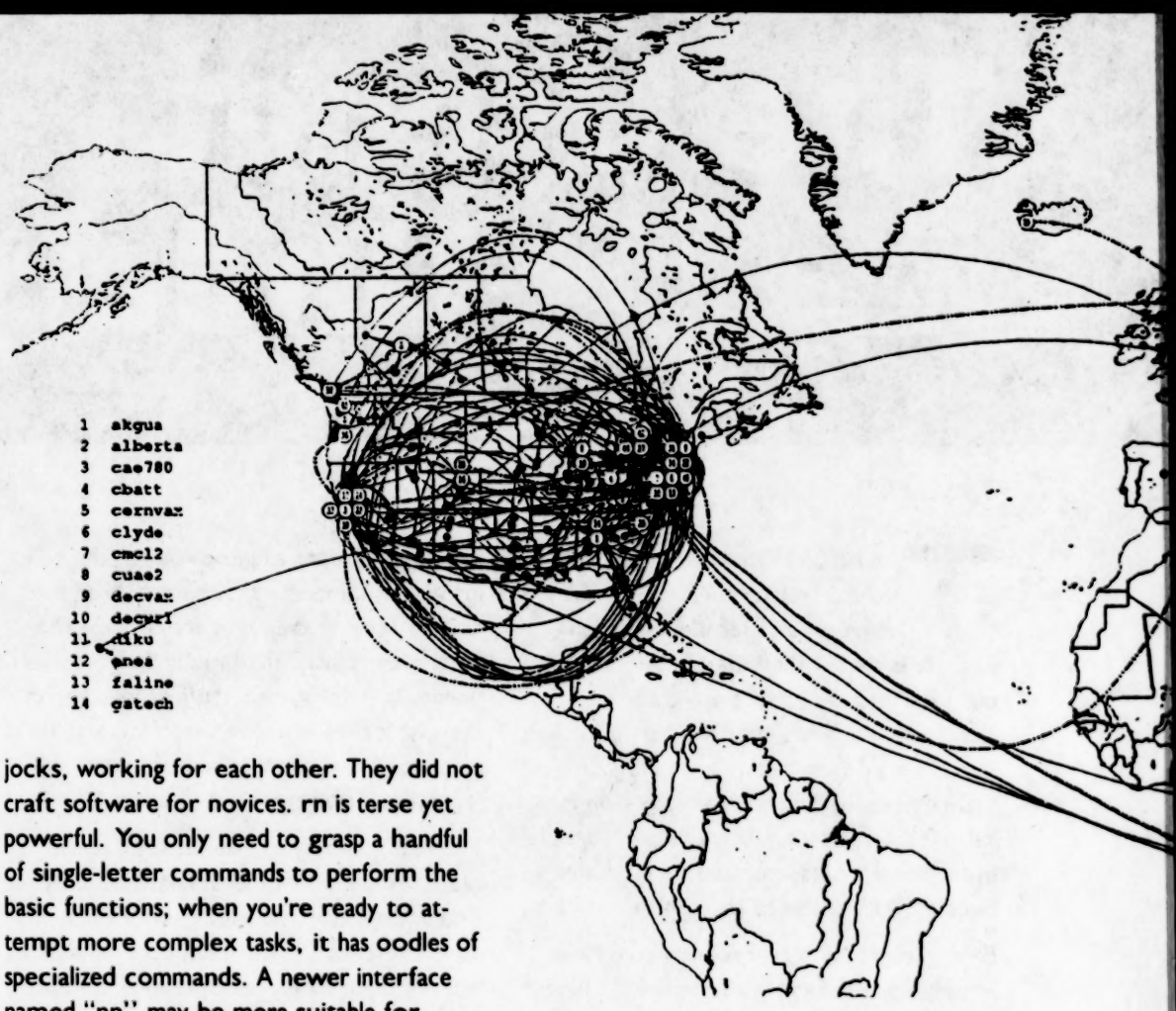
Not all sites get all newsgroups. Some subjects are pretty esoteric, and the sheer volume (around 50 megabytes/week, for all newsgroups combined) may overrun the available storage capacity. For the same reason most sites have to dump articles after a few weeks, to make room for more. Fortunately, some sites archive items from certain newsgroups, and there are ways to order copies through the net.

Each site administrator decides which newsgroups to get, often based on what the users there want. Usenetters can "subscribe" to newsgroups they want to read regularly; when they run one of the programs for article selection, they'll see the subject headings of all recent unread articles in just their chosen newsgroups. They can still call up articles from other newsgroups received at the site. Subscriptions are just an easy way to reduce the time spent scanning and rejecting unwanted material.

Here is a list of one day's worth of articles in "sci.energy," a medium-size newsgroup with consistently good postings. The numbering shows the order of arrival at the WELL (higher = more recent). Numbering may vary from site to site, since not all articles travel the same route. To start reading any of these, you just type the article number. "Re:" means a reply to a previous posting:

564 Re: Office Equipment As Energy Users
565 Fuel cells — your experience?
566 Re: Outdoor Lighting
567 Re: "Revolutionary" Solar Cell Technology
568 Re: Outdoor Lighting
569 Re: Electric cars? Start with wheelchairs.
571 Energy-efficient lightbulbs
572 Re: energy-efficient lightbulbs
573 Re: Office Equipment As Energy Users
574 Re: Outdoor Lighting
575 Venting clothes driers — inside or outside?
576 Re: Energy satellites
577 Re: Energy-efficient lightbulbs
578 Longer-life lightbulbs — home use
579 Re: hydro power and solar power are NOT CLEAN

Each Usenet site has programs that let readers select, display, reply to, and dispose of articles. The above is what one would see using the interface program called "rn." Some find these interfaces intimidating or hard to learn. They aren't difficult, really, once you get the hang of them. But those who developed Usenet were computer jocks, working for each other. They did not craft software for novices. rn is terse yet powerful. You only need to grasp a handful of single-letter commands to perform the basic functions; when you're ready to attempt more complex tasks, it has oodles of specialized commands. A newer interface named "nn" may be more suitable for beginners. It has fewer commands to learn and nice "help" menus.



GETTING STARTED

To use Usenet you have to find a convenient, affordable point of access. Even if you aren't working or studying at a site-sponsoring institution, you may be able to convince a friend who is to capture articles or newsgroups for you on floppy disk. They might even let you dial in to their computer directly to download material, or to visit in person to browse once in a while.

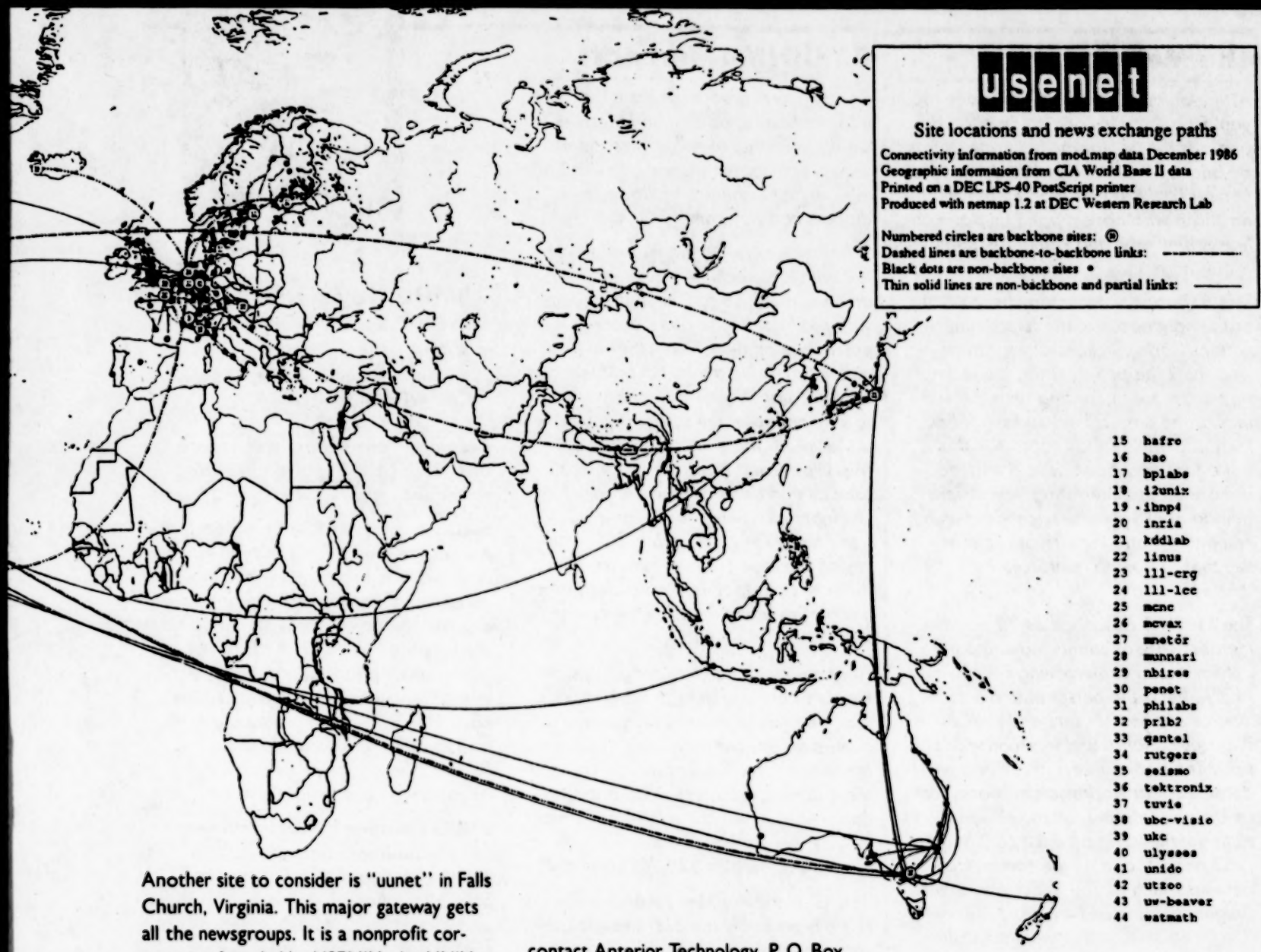
Then there are public access sites. The following is extracted from a list maintained by Phil Eschallier. The following entries all provide Usenet access for free — though they might not carry all the newsgroups you want. Keep in mind that some of the information here may be outdated by the time you read it. Updated versions of Eschallier's list are posted every couple of weeks in the "pubnet.nixpub" newsgroup.

Usenet Public Access Sites

Telephone #	Sys-name	Location	
201/846-2460	althea	New Brunswick	NJ
212/879-9031	dasys1	NYC	NY
213/376-5714	pnet02	Redondo Bch	CA
214/247-2367	ozdaltx	Dallas	TX
214/741-2130	attctc	Dallas	TX
215/348-9727	lgnp1	Doylestown	PA
312/272-5912	igloo	Northbrook	IL
312/283-0559	chinet	Chicago	IL
312/301-2100	joinet	Joliet	IL
312/566-8911	ddsw1	Mundelein	IL
312/833-8126	vpnet	Villa Park	IL
313/623-6309	nucleus	Clarkston	MI
404/321-5020	jdyx	Atlanta	GA
407/380-6228	rtmvax	Orlando	FL
408/247-4810	sharks	Santa Clara	CA
408/725-0561	portal	Cupertino	CA
408/997-9119	netcom	San Jose	CA
412/431-8649	eklektik	Pittsburg	PA
415/332-6106	well	Sausalito	CA
415/753-5265	wet	San Francisco	CA
415/783-2543	esfenn	Hayward	CA
416/452-0926	telly	Brampton	ON
416/461-2608	tmsoft	Toronto	ON
416/654-8854	ziebmef	Toronto	ON
502/968-5401	disk	Louisville	KY
503/254-0458	bucket	Portland	OR
503/640-4262	agora	PDX	OR
516/872-2137	lilink	Long Island	NY
518/346-8033	sixhub	upstate	NY
602/941-2005	xroads	Phoenix	AZ
603/880-8120	ubbs-nh	Nashua	NH
605/348-2738	loft386	Rapid City	SD
608/273-2657	madnix	Madison	WI
612/473-2295	pnet51	Minneapolis	MN
615/896-8716	raider	Murfreesboro	TN
616/457-1964	wybbs	Jenison	MI
619/444-7006	pnet01	El Cajon	CA
703/281-7997	grebyn	Vienna	VA
713/334-1204	nuchat	Houston	TX
713/438-5018	sugar	Houston	TX
714/842-5851	conexch	Santa Ana	CA
714/894-2246	stanton	Irvine	CA
801/943-7947	i-core	Salt Lake City	UT
802/865-3614	tmi	Burlington	VT
919/493-7111	wolves	Durham	NC

The WELL* is a Usenet site, and has at least three features which recommend it as a good choice for access. First, there is an online conference devoted to using Usenet effectively. When you enter the WELL, type "g usenet" to get there. It has a library of basic references, you can ask questions without feeling stupid, get answers from the staff gurus, and read the answers to others who are elsewhere on the learning curve. The second attraction is that the WELL gets nearly all of the active newsgroups, mainstream and otherwise. The third is that the cost is low ($8/month and $3/hour, plus communications-link charges).

**The WELL, 27 Gate Five Road, Sausalito, CA 94965; 415/332-4335.*



Another site to consider is "uunet" in Falls Church, Virginia. This major gateway gets all the newsgroups. It is a nonprofit corporation founded by USENIX, the UNIX users' association, to improve access and provide news-feeds to other sites on contract. Prices depend on all sorts of variables (how many news-feeds you want, how you connect to uunet, etc.), but the base rate is $35/month, plus communications charges. uunet is reachable through the Compuserve Packet network or via Tymenet, and they can open accounts for you at either. To take a news-feed from uunet, your computer must have the suite of UNIX programs called "uucp," or one of the substitutes designed for non-UNIX machines. For a free information kit, contact uunet at 3110 Fairfield Park Drive, Suite 570, Falls Church, VA 22042-4239 (voice phone 703/876-5050).

Because Usenet has grown so vast and so time-consuming to sort through, Anterior Technology has started an article filtration service. Their editors eliminate what they consider junk, and the refined product is marketed as the "In Moderation Network." This is a controversial venture which many Usenetters think violates the spirit and ideals of the net. However, it may be practical as a time-saver, if you're only interested in "serious" newsgroups, not the ones where emotional, unresolvable or outrageous discussions prevail. For more information, contact Anterior Technology, P. O. Box 1206, Menlo Park, CA 94026-1206; 415/328-5615.

Once you have access to Usenet, you have to learn to use at least one of the interfaces. The manuals can be found at the sites where they are installed. However, they are invariably written in hacker-ese, and may not be enough to get you through your first session unassisted. It helps to watch someone else go through a session before attempting it solo, and if you can find a more experienced person to coach you through your first encounter, that's even better. Again, it's not that the interfaces are difficult. It's just that they'll present you with unfamiliar options, and the on-screen "help" may not be adequate.

For self-tutoring, a book called *UNIX Communications* explains how to use Usenet in clear, easy-to-follow steps. It covers the most popular interfaces, netnews, electronic mail, "uucp" file transfers and the basics of posting articles. It got me started, and I still rummage through it for new insights. (*UNIX Communications*, by Bart Anderson, Bryan Costales, and Harry Henderson: © 1987; 542 pp. $26.95 from Howard W. Sams & Co., 4300 W. 62nd Street, Indianapolis, IN 46268.)

Once you actually get into Usenet, you'll find additional resources there to fine-tune and expand your skills. Subscribe to these newsgroups, and pretty soon you'll be teaching your friends how to use Usenet:

news.newusers.questions: Questions/answers for beginners
news.announce.newusers: Guidance, explanations of USENET policies
news.groups News about newsgroups
news. misc Discussions of USENET itself

A shareware program called UFGATE enables IBM-compatibles to exchange files, electronic mail and newsgroup articles with USENET — in effect turning a PC with access into a "leaf site." UFGATE is free to noncommercial users. There's a $35 registration fee for those wanting support, a manual and updates; registration is $195 for commercial sites. UFGATE can be downloaded directly from the Late Night Software BBS (415/695-0759), or ordered on diskette from Late Night Software, c/o Tim Pozar, 671 28th Street, San Francisco, CA 94131 (voice phone 415/695-7727). ■

The Matrix

After you've successfully taken one trip, you grab the atlas and study it for ideas and possibilities for the next one. This is an atlas of the world of telecommunication networks. It's a great reference book for those who have dipped into one online community, and wonder what else is out there.

This 631-page volume may become one of the holy books of the telecommunications world — especially for those who think the people using the technology are more interesting than the workings of the physical networks that link them together. This is not to say that it is not a technical book; it is. But the focus is more on the interesting interactions among hobbyists, the scientific research community, and the virtual communities that are being reinforced by this technology.

The Matrix is described as "a worldwide metanetwork of connected computer networks and conferencing systems . . . [that] affects the personal and social lives of millions of users and even influences national and international politics." The book surveys in comprehensive detail existing worldwide networks such as Usenet, Internet, all the regional and national networks on each continent (263 pages), and all the commercial networks such as The WELL and others. I highly recommend this work.

—Steve Cisler

The Matrix
John S. Quarterman, 1989; 600 pp.
$49.95 postpaid from Digital Press/Sales, 12 Crosby Drive, mail stop BUO/E94, Bedford, MA 01730; 800/343-8321 (or Whole Earth Access).

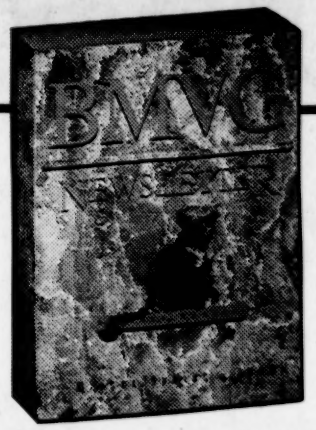
BMUG/Mac Support

As computers gradually worm their way into our homes, offices, and lifestyles, we discover that to fully utilize them requires computer support. It's like finding out that babies are followed by diapers and day care.

*Whether you're getting into a love affair with the machine or just optimizing an investment, computer support begins with reading the literature. Since computer developments, like other hi-tech ephemera, have a minimal half life, a monthly magazine is a must if you want to stay on top of the scene. If you have a Macintosh there's a choice of two — **MacWorld** and **MacUser**. I subscribe to each and had hoped eventually to eliminate the lesser, but so far it's a dead heat. They are both good at surveying the Mac scene in general, and they are both toothless watchdogs when it comes to biting the advertisers who feed them. Take your pick.*

After magazines come user groups. Here's where you get the straight poop that the revenue-hungry magazines don't pass on. For Mac users these are Macintosh User Groups, or MUGs, and there are hundreds in the US and Canada. (Apple even has a toll-free number for anyone wanting to track down their local MUG; it's 800/538-9696, ext. 500.)

BMUG, a crew of Mac fanatics in Berkeley, is probably the best known. They came together as a crew of struggling students in 1984, a few milliseconds after the Mac 128 materialized. Now flash forward from struggling students and dinky 128s to the present — a 6,500-member, worldwide organization that twice a year puts out a two-pound, 440-page "newsletter" with a press run of 11,000. BMUG is obviously doing something right.

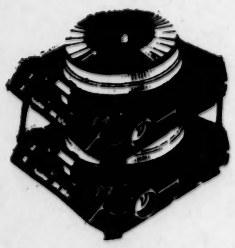


BMUG Newsletter
Randall P. Simon, Production Manager
$40/year (2 issues) from BMUG Inc., 1442A Walnut Street, Berkeley, CA 94709; 415/549-2684.

BMUG combines folksy openness that's part of the Mac aura with high-energy enthusiasm to produce a noncommercial, nonprofit operation thriving on its own energy. Their philosophy is embodied in their motto, "We're in the business of giving away information." In an era when the location of a few pixels on a computer screen can produce a multi-million-dollar corporate lawsuit, BMUG's happy-go-lucky consumer advocacy is pure delight.

BMUG grosses a half million a year from membership fees and software sales, which goes to support its own BBS, a telephone helpline for members, and a paid staff. Weekly meetings have featured some of the major names in the industry as speakers. There are a dozen special-interest groups (SIGs) that focus on topics from music and desktop publishing to telecommunications and CAD/CAM, and for beginners there's a BasicMac SIG. —Dick Fugett

POLARIZING FILTERS FOR 3-D PROJECTION



3" x 3" square polarizers with polarization at standard (45°) angle to edge. Thick (.030") plastic. Set of 2.
Stock No. 7503
$14.95 (0.1 lb.)

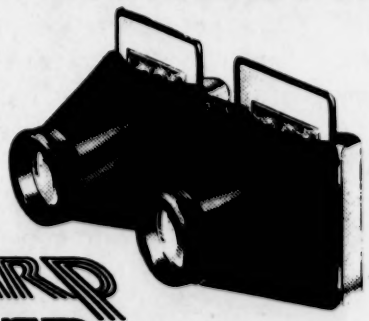
3-D Catalog

Hey, look at this! It's a catalog of nearly every kind of 3-D stereo gadget that's available. They've got those funky red-and-blue cardboard glasses for 3-D movies, several makes of View-Masters that take circular disks of travel snapshots (you can make your own), and modern stereo picture viewing equipment. And books, supplies, and special devices to let you take 3-D photographs with 35mm film. Get a polarizing kit for a pair of projectors and put on a slide show that nobody will sleep through.

—Kevin Kelly

3-D Catalog
Catalog **free** from Reel 3-D Enterprises, Inc., P. O. Box 2368, Culver City, CA 90231; 213/837-2368.

CARDBOARD FRAME POLARIZED 3-D GLASSES
When low cost is the main consideration these offer quality polarizers in cardboard frames. Styles subject to change without notice.
Stock No. 7002.....$2.45/5pr. (0.2 lb.)
50 to 99 pairs.....$.45 each (0.4 lb. per 10)
100 to 199 pairs...$.40 each (0.4 lb. per 10)



TWIN CABLE RELEASE

- Simultaneously fires two cameras
- Mechanical type, standard tapered threads
- Has synchronization adjustment
- Allows up to 20" separation
- Precision made in West Germany

Stock No. 8404..... $34.95 (0.3 lb.)

The Data Informer

Extremely pricey newsletter for extremely addicted information junkies. Great tips for mining the national wealth of knowledge buried in the bureaucratic mazes of that Ultimate Information Processing Unit: the large-scale chip of Washington, DC. Here are some excerpts from a single issue. —*Kevin Kelly*

•

Does Your Bank Violate the Privacy of Your Business?
Under the fair credit and financial privacy laws your bank cannot give financial information about your account without your approval. However, this law does not cover your business or commercial accounts. As a result, most banks provide financial information on the amount of your average daily balance, amount of loans etc. to organizations like Dun and Bradstreet without customer's approval. What is strange is that there is a law which prevents banks from divulging this information to government agencies but not to private organizations. It is estimated that about 80% of the banks participate in this practice. To stop this invasion of privacy, tell your banker to take you off the list.

•

Opportunities in Reading Freedom of Information Act Letters
The greatest aspect of the Freedom of Information Act (FOIA) is the fact that all Freedom of Information Act request letters are available under the Freedom of Information Act. This means that you can go to your favorite federal office and request to see copies of all FOIA request letters. The problem with finding information in Washington is that you don't know what to ask for because you don't know what is available. Reading these letters provides great information clues and shopping lists on what others have spent weeks, days or even years in trying to uncover.

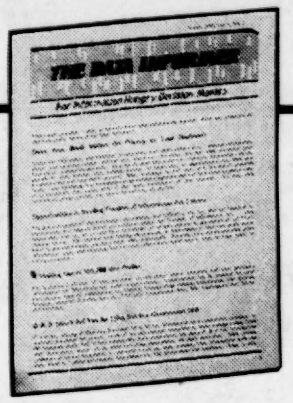
•

Get Tomorrow's Wall Street Journal Headlines Today
By calling recorded messages in Washington, DC you can get the same information by 10 o'clock in the morning that will appear in tomorrow's ''Wall Street Journal''. This is where business reporters get the news. The recording is available 24 hours a day.

US Department of Commerce:
202-393-4100
Bureau of Labor Statistics:
202-523-9658
Federal Reserve Board:
202-452-3206

•

Is the Government Treating You Unfairly? Uncle Sam Will Sue Itself For You
It is an amazing fact but true. A special division, within the Office of Advocacy at the US Small Business Administration, will actually take the government to court if your business is not getting a fair deal,



The Data Informer
Matthew Lesko, Editor
$128/year (12 issues) from Information USA, Inc., P. O. Box 15700, Chevy Chase, MD 20815; 301/657-1200.

and this litigation is all done FREE. This office recently helped a small electronics manufacturer in California which lost a contract worth a few million dollars because of some bureaucratic bungling. This office not only did all the legal wrestling for the company FREE and got the manufacturer a government contract, but it succeeded in winning a bigger contract than the firm originally had. Contact: Office of Chief Counsel, US Small Business Administration, 1441 L St NW, Washington, DC 20416, 202-653-6533 or toll-free at 800-368-5855.

•

A $1,500 Market Study For Free
Many of the high priced market studies, like those of Frost and Sullivan or Predicasts, carry copyrights, and as a result are available free from the Library of Congress. The Library receives two copies of all copyrighted material and usually adds these reports to its collection. The problem is that these companies are aware that people use the Library of Congress to see these studies and, as a result, they often wait to the last possible legal moment before filing their copyright. The Library is basically set up for visiting researchers, so the easiest way to see these is to visit the library in person. However, these studies are also available through an inter-library loan arranged through your local library. The telephone reference section at the Library of Congress (10 First Street, SE, Washington, DC 20540, 202-287-5522), or your congressman's office (call the Capitol Hill Switchboard at 202-224-3121) can likely supply you with a list of the Library's holdings on a given topic.

•

The 7-Phone Call Rule
In our world of free information and experts, I have developed a theory that anyone can find a free expert on any topic within an average of 7 telephone calls. The difference between those who get their information and those who do not is that the winners know that in the first 5 or 6 telephone calls they will get the runaround, unknowledgeable experts and maybe even talk to the same person twice. Those who don't believe in the 7-phone call rule give up after one or two calls and wind up losers.

•

Protect Your Invention for Only $6.00
Before you spend thousands on lawyers or consultants to protect your idea or invention, for six bucks Uncle Sam will safeguard your idea for two years if you put it down on paper with drawings and photos and send it in. For details on this Disclosure Statement contact: Commissioner of Patents and Trademarks, Patent and Trademark Office, Department of Commerce, Washington, DC 20231, 703-557-3225.

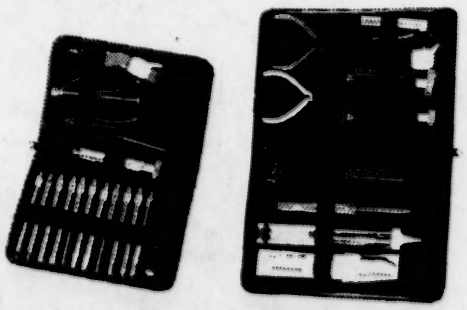
•

Country Experts Are the Place to Start for Overseas Opportunities
If you are looking for information on a market, company or most any other aspect of commercial life in a particular country, your best point of departure is to contact the appropriate country desk officer at the US Department of Commerce. These experts often have the information you need right at their fingertips or they can refer you to other country specialists. Contact: US Foreign and Commercial Services, International Trade Administration, US Department of Commerce, Room 2810, Washington, DC 20230, 202-377-8220.

CompuAdd Computer Tool Kit

Sooner or later you will need one or more screwdrivers if you work with computers and their various add-ons, cables, and attachments. When you do need them, I've found this tool kit proves very handy. You will find tool kits of all prices and complexity but this one meets my needs for lowest cost (in case I lose it), yet contains all the essentials for the novice technician. The nice case keeps it all together so I can find the tools when I need them. *Milton Sandy, Jr.*

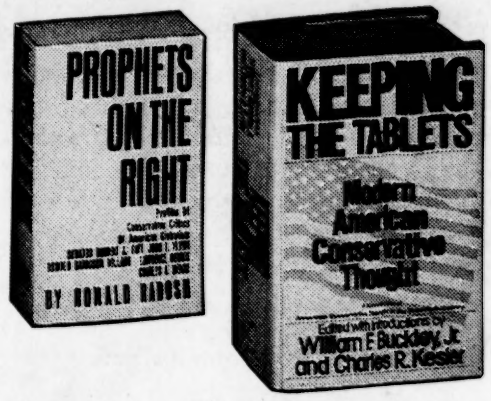
Computer Tool Kit
Catalog **free** from CompuAdd Corporation, P. O. Box 200777, Austin, TX 78720-0777; 800/627-1967.



Basic Tool Kit includes chip inserter, extractor, 3-claw holder, tweezers, four screwdrivers, four nutdrivers, and Torx screwdriver in a vinyl case. *41131* - **$14**
Soldering Tool Kit includes chip inserter, extractor, anti-static wrist strap, coiled ground cord, soldering iron, desoldering tool, solder tools, pliers, and clippers in a vinyl case. *41132* - **$24.95 (Reg $35)**
Advanced Tool Kit includes chip inserter, chip and square chip extractors, anti-static wrist strap, multiple screwdriver with six extensions, two nutdrivers, and two Torx screwdrivers in a vinyl case. *41133* - **$39**
Troubleshooting Tool Kit includes chip inserter, chip and square chip extractors, anti-static wrist strap, multiple screwdriver with six extensions, two nutdrivers, two Torx screwdrivers, a logic probe, a logic pulser, and a 3-piece tweezer set in a vinyl case. *41134* - **$69 (Reg. $89)**

ACCESS TO CONSERVATISM

BY JAY KINNEY



AT FIRST GLANCE the concept of providing access to conservatism must come across as absurd. If there is any political philosophy which has been thrust down our throats, whether we've wanted it or not, since 1980, it would have to be conservatism. After all, isn't that what Reagan, the Moral Majority, and George Bush are all about? Actually, no.

Hold tight, and let me explain. What Reagan, Bush, and Falwell are actually about is the manipulation of public opinion through the sophisticated use of the mass media. Through their employment of the modern "sciences" of demographics, marketing, and public relations, these noble souls have fashioned a consensus for public policies that are portrayed as "conservative." However, it should be pointed out that many good-ol'-fashioned conservatives (predating the so-called New Right of the late seventies) are probably enjoying "heavy rotation" in their crypts even as we speak. These departed conservatives were characterized by a passion for freedom, economic prudence, and a suspicion of foreign entanglements — all values to be found only fitfully in the present Republican mainstream.

But what about the fascist insect that preys upon the life of the people?, you may ask. Surely you don't mean to imply that artists should be denied government funding for crucifixes soaked in urine, or that we should seriously consider Patrick Buchanan as future presidential fodder? Ho ho, I shan't let you trap me in such pseudo-controversies. Finding value in some aspects of conservatism needn't mean that one has undergone a prefrontal lobotomy any more than going to church means one is a Christian. Things are more complex than they seem at first glance.

For the past couple of years I've been giving serious study to conservative philosophy, partly out of morbid curiosity and partly out of an obligation I've felt upon discovering that some conservative intellectuals actually make as much sense as (if not more than) their liberal counterparts. Of course my enthusiasm is tempered somewhat by the realization that brilliant conservative philosophizing has about as much to do with conservative *realpolitik* as top-notch Marxist theory has to do with North Korea. Anyone can make a great case for anything — on paper — and I'm likely to be impressed, at least momentarily. As to what set of values and analysis works best in the long run, that's another story altogether. I haven't sorted that out as yet, but if I do you'll be the first to know. In the meantime, what follows is a compact reader's guide to conservatism at its most stimulating. If you've been writing off conservatives as a bunch of old, prejudiced gasbags, prepare to be surprised.

National Review

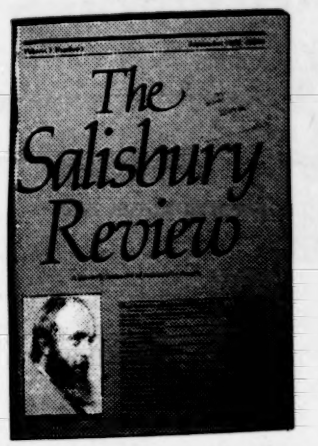
***Prophets on the Right* by Ronald Radosh. 1978; 351 pp., $5.95. (OOP; remaining copies available from Laissez Faire Books, 942 Howard Street, San Francisco, CA 94103).** These days Radosh's name is mud on the left for having lost the true faith, but he was still very much part of the New Left when he wrote this important study of "Old Right" thinkers. In its pages, the reader finds that the isolationist Right prior to WWII had much in common with the anti-Vietnam New Left: not only did they both fight against an American role as international policeman but they championed similar aspects of individual freedom. This book, whose subjects include Senator Robert A. Taft, historian Charles A. Beard, and one-time fascist Lawrence Dennis, is a good starting point for getting one's unconscious prejudices kicked in the head.

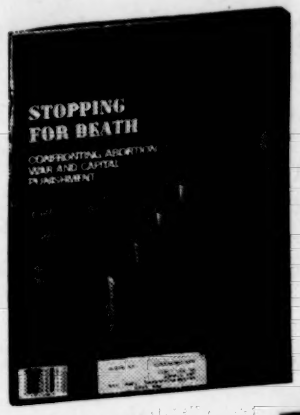
***Keeping the Tablets: Modern American Conservative Thought*, edited by William F. Buckley and Charles R. Kesler, 1988, 469 pp., $19.45 postpaid. (J. B. Lippincott, P. O. Box 1630, Hagerstown, MD 21741.)**

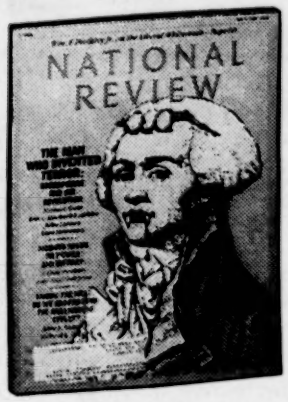
Yes, I know, Gore Vidal nailed Buckley as a "crypto-fascist" back during the 1964 presidential campaign, and Buckley's manner both in print and on "The Firing Line" over the years has been a mighty argument against letting Yalies have free access to Roget's Thesaurus. Still, this is an excellent anthology of highly readable essays both explicating American conservative thought and providing insights into the conflicting currents within the "movement." If you've never run into the prose of Willmoore Kendall or Alfred Jay Nock, you are unnecessarily denying yourself a great pleasure, and their selections in this book are an excellent place to start.

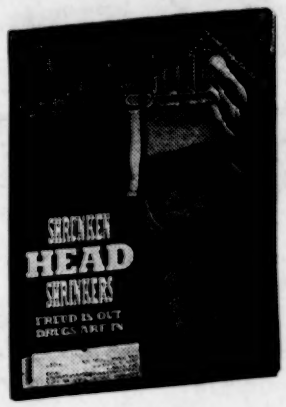
***Salisbury Review.* Roger Scruton, editor, $30/year, 14 issues (The Claridge Press, 43 Queen's Gardens, London W2, U.K.)**

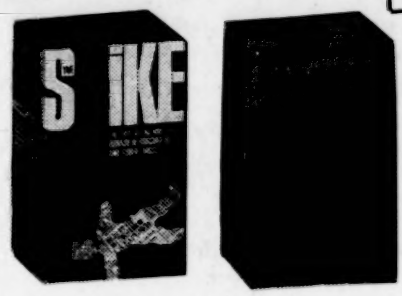
This Tory intellectual journal hails from England, which, given the British knack for intelligent writing, may be sufficient cause to recommend it. There's more, however. Given the polarized state of English politics, both the left and the right over there are more given to following their ideologies to their logical conclusions. Thus their conservatives shoot to kill when they take aim at left intellectuals,











socialist town councils, feminists, and progressive teachers, social workers, and bureaucrats. And the left shoots back with rhetoric blazing. Editor Roger Scruton, notorious for his opinionated column in the *Times* (of London), has here fashioned a forum for unrepentant Tories with some well-earned chips on their shoulders. Scruton's own devastating profiles of individual left intellectuals graced the pages of the *Salisbury Review* for several years before being collected in the anthology, *Thinkers of the New Left*. At $30 a year for 4 issues, you may want to sample this journal at a local university library, presuming they even know it exists.

***Chronicles*. Thomas Fleming, editor, $21/year, 12 issues (Chronicles, P.O. Box 800, Mount Morris, IL 61054-8082; 800/435-0715)**

These days a feud is brewing between two factions of U.S. conservatives: the so-called Paleo-cons and the Neo-cons. *Chronicles* (originally *Chronicles of Culture)* falls solidly into the Paleo-con camp, which seems to mean that its publishers, the Rockford (Illinois) Institute, distrust the cosmopolitan East and West coasts almost as much as they distrust the Twentieth Century. There's a doughty Mid-American allegiance to traditional values and distrust of aristocratic privilege at work in *Chronicles* that leads to charges of "populism" and "nativism" from its critics. What the critics seem to overlook is that *Chronicles* is publishing some of the best conservative cultural criticism and reviews in the country.

***National Review*. William F. Buckley, editor, $39/year, 25 issues (National Review, P.O. Box 96639, Washington, DC 20077-7471; 800/222-6806).**

The traditional left wisdom would have it that William F. Buckley's *National Review* is beneath contempt. The truth is that it prints as much good writing as *The Nation* and exhibits a much stronger sense of humor while it's at it. Buckley and the *National Review* have been tied in much closer to the circles of Washington power in the eighties, and it has taken its toll on *NR*'s sense of beleaguered purity. Nevertheless, this is probably the best place to look to get a feel for who is currently hot shit in the conservative intellectual firmament.

***The Spike* by Arnaud de Borchgrave and Robert Moss (OOP; Avon Books) and *Death Beam* by Robert Moss (424 pp.; $5.50 postpaid from Berkley Order Dept., P. O. Box 506, E. Rutherford, NJ 07073; 800/223-0510).**

I wouldn't turn to suspense potboilers to get an accurate picture of global politics, and that's certainly not what these two spy novels offer. What they do convey is the visceral conservative cold-war mythos in a nutshell. These entertaining *roman á clef* exercises in character assassination spin a cut-throat world where most of the liberal characters are either unwitting or witting KGB dupes. Jolly good yuks.

***AIM Report*. Reed Irvine, Editor. (Available for $20/year dues to Accuracy in Media, 1275 K Street NW, Suite 1150, Washington, DC 20005; 202-371-6710.)**

It never fails to amaze me how the conservatives can claim that the media have a liberal bias, while at the very same time the liberals can complain that the media have a, you guessed it, conservative bias. Well, which is it?? This six-page, twice-monthly newsletter is devoted to exposing and protesting every lapse in judgment on the part of network and big newspaper honchos, which usually amount to letting mildly oppositional judgments and causes creep on the air or into print without an immediate conservative rejoinder. More than any of the above, *AIM Report* smacks of a certain crankiness. Still, Irvine does occasionally hit on-target.

***Insight*. (Arnaud de Borchgrave, editor. $25.50/year, weekly. Customer Service, P.O. Box 91022, Washington, DC 20090-6067; 202/636-8800)**

No survey of conservative publications would be complete without including at least one emanating from the publishing combine of the *Washington Times*, the conservative newspaper owned by Rev. Moon and the Unification Church. Whatever one may think of Moon, there's no denying that he has become a major funder of conservative causes and print. This weekly newsmagazine is engaging and well written, with its conservative cultural slant presented with subtlety and taste. The U.S. conservative community has yet to come to terms with the possible implications of Moon's extended patronage. Someday we may hear great howls of outrage when he finally hands them the bill.

Coming to terms with conservatism needn't mean flipping from doper to narc or from radical to reactionary. Just replacing one set of unexamined assumptions with another doesn't really get us anywhere. Yet the begrudging knowledge of our own limitations — and of the limitations of all human organizations and intentions — obliges us to periodically weigh what can be changed against what needs to be preserved. Conservatives, by championing what has come down to us over many generations and by looking askance at the promises (and results) of reformers and revolutionaries, perform an essential function. A close reading of the writings above should reveal that there is more to this political philosophy than name-calling and clichés would lead us to believe. ■

National Review

Zeta Magazine

***Zeta** was founded two years ago with the goal of being a non-sectarian and all-encompassing organ of communication for the US left — and it has succeeded in filling an activist-oriented theoretical slot somewhere to the left of **The Nation**.*

*In more than 100 ad-free pages a month, **Zeta** offers a mixture of regular columns by writers covering various movement, international and theoretical beats, longer special features, good cultural coverage and graphics from political cartoons to photo essays. I have no doubt that the featured big names are what initially sell readers on **Zeta** (Noam Chomsky, Alex Cockburn, Barbara Ehrenreich), but the quality of the lesser-known writers and the wide range of topics which they cover in depth is what keeps me reading. There is a lot in every issue that I find myself disagreeing with — but then, I guess that's the point.*

—Keith Jordan

•

As far back as I can remember, I have considered myself a progressive. I was proud to be associated with what I saw as the progressive tradition — populism, the communist movement of the thirties, the civil rights struggle, the women's movement, and so on. Today, I no longer use that label. I am no longer a progressive.

It's not that I've become a Second Thoughter (a particularly venal brand of neoconservative). Nor am I now a liberal. My renunciation was not even caused by the fact that Dukakis and his crowd switched from "liberal" to "progressive" during the presidential campaign. No, my conversion is due to the recognition that *progress*, the root word of progressive, isn't all it's cracked up to be.

Zeta Magazine
Lydia Sargent and
Michael Albert, Editors.

$24/year (12 issues) from Zeta, 116 St. Botolph Street, Boston, MA 02115-9979; 617/236-5878.

League of Nations Trading Cards

Have you secretly wanted to join in on the baseball-card trading frenzy, but felt that it was too un-serious for your image? Well, here's your chance to get in on the ground floor of a new and (sort of) serious collecting hobby: trading world-leader bio cards. These cards might even help kids in school improve their international political literacy.

And don't forget the League of Nations Trading Cards slogan:

"Governments may rise & fall. Hurry & collect them all."

—Keith Jordan

League of Nations Trading Cards

$2.50/pack of 18, postpaid from Calico Graphics, 733-A Cortland Street, San Francisco, CA 94110; 415/648-0240.

The Great Divide

Studs Terkel's latest is a great and disturbing book about America today. Terkel shows two real strains in our culture now, a vocal adherence to "me first, anything to get ahead" with an emotional response to those less fortunate, which results in a kind of living lie or dichotomy; and a profound lack of history which results in a kind of pride of ignorance. Terkel found many people who prided themselves on not even wanting to know things. It gave me a lot to think about. —George Mokray

•

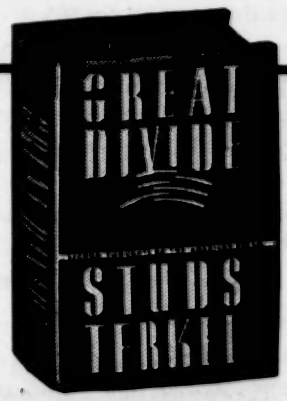
A young, blue-collar housewife is ridiculed by her companions, especially her husband, at the neighborhood tavern. "They think anybody who doesn't agree with Reagan is dumb. Anybody who gets involved is stupid. They laugh at me all the time." She has coined a word: ignorance-proud.

Further evidence is offered by a teacher at a Midwestern campus. "It's not just the ignorance that's disturbing. It's the acceptance of ignorance. It's acceptable *not* to know about serious things. People who are really interested are bores, the kind you turn off, away from at parties."

•

The Vietnam War was fought by blacks and hillbillies. Good hunters, good people in the woods. People who didn't have anywhere else to go. . . .

There's a real hunger for stories. There's a hunger for people to be real. We voted for Reagan because we're movie-star-struck. The reason we're image-struck is because we don't like who we are. We don't like saying we're okay as regular people.



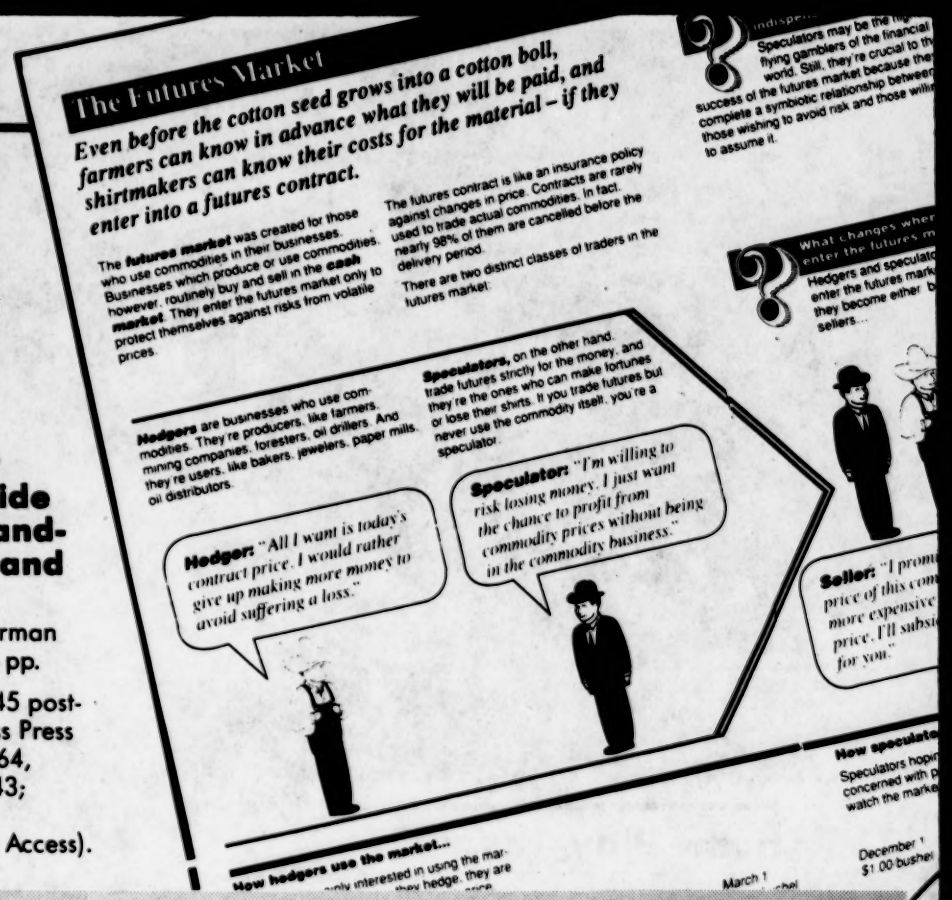
The Great Divide
Studs Terkel, 1988; 439 pp.

$18.95 ($20.45 postpaid) from Random House, Inc., 400 Hahn Road, Westminster, MD 21157; 301/848-1900 (or Whole Earth Access).

The Wall Street Journal Guide to Understanding Money and Markets

*The genius of this brief book is that it is at once both an operating manual to the grey columns of numbers in **The Wall Street Journal**, and an enlightening field guide to how our worldwide financial money markets work. It accomplishes this by being overwhelmingly visual. Other prize-winning Access guides lead you through convoluted cities (London, Rome, New York). This one steers you through the financial labyrinth of stocks, bonds, options with clarity and intelligence. For as long as I can remember I have been baffled by why all those crazy, overpaid guys in suits on Wall Street needed to shout and wave little bits of paper around. Now I know.* —Kevin Kelly

The Wall Street Journal Guide to Understanding Money and Markets
Richard Saul Wurman et al., 1989; 125 pp.
$12.95 ($15.45 postpaid) from Access Press Ltd., P. O. Box 664, Holmes, PA 19043; 800/345-8112 (or Whole Earth Access).



Keeping Tabs on Your Stock

At first glance, stock listings look like an endless sea of numbers. This has more to do with the volume of listings and the use of small type than with the complexity of the information.

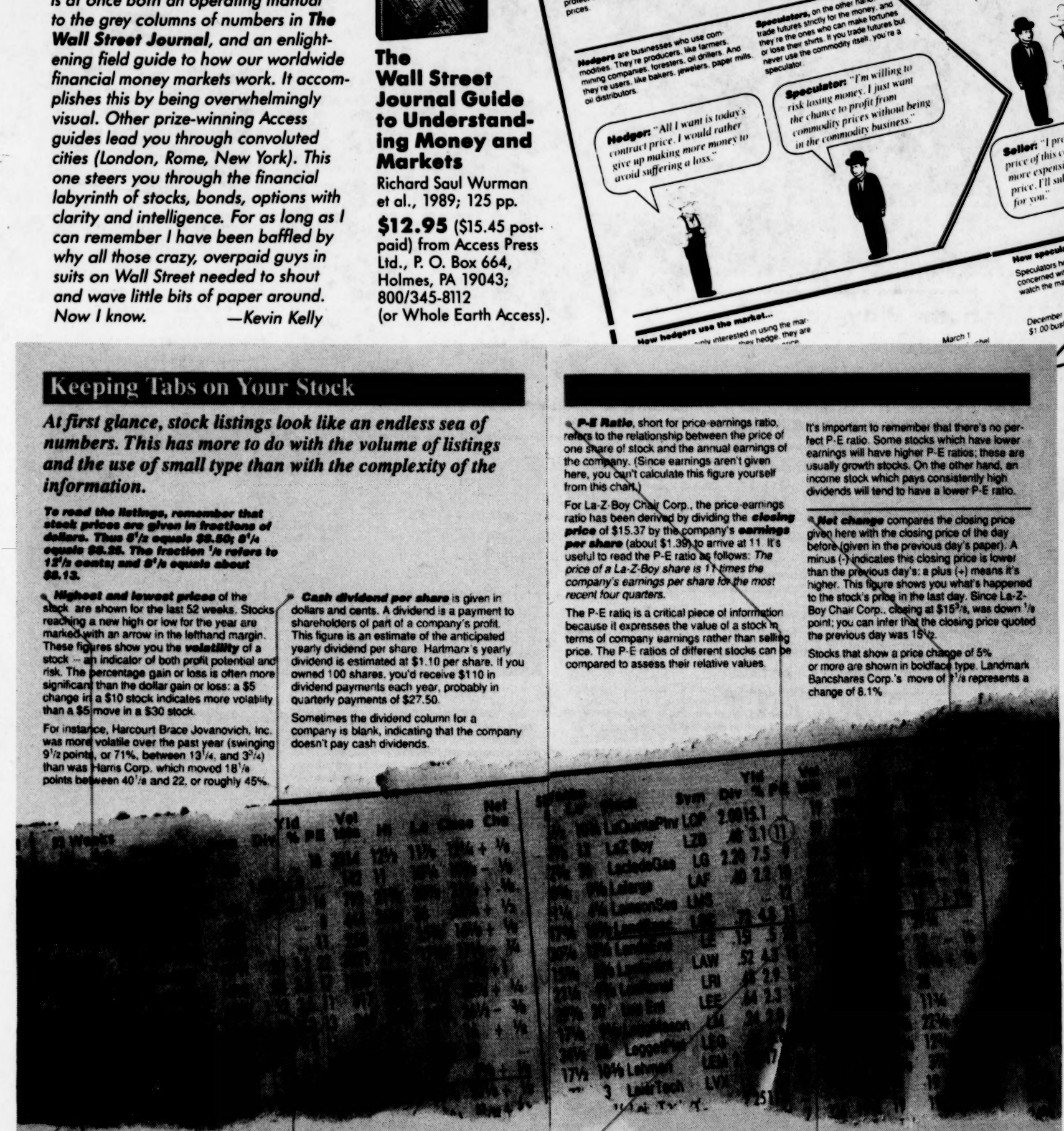
To read the listings, remember that stock prices are given in fractions of dollars. Thus 8½ equals $8.50; 8¼ equals $8.25. The fraction ⅛ refers to 12½ cents; and 8⅛ equals about $8.13.

Highest and lowest prices of the stock are shown for the last 52 weeks. Stocks reaching a new high or low for the year are marked with an arrow in the lefthand margin. These figures show you the **volatility** of a stock – an indicator of both profit potential and risk. The percentage gain or loss is often more significant than the dollar gain or loss: a $5 change in a $10 stock indicates more volatility than a $5 move in a $30 stock.

For instance, Harcourt Brace Jovanovich, Inc. was more volatile over the past year (swinging 9½ points, or 71%, between 13¼ and 3¾) than was Harris Corp. which moved 18⅛ points between 40⅞ and 22, or roughly 45%.

Cash dividend per share is given in dollars and cents. A dividend is a payment to shareholders of part of a company's profit. This figure is an estimate of the anticipated yearly dividend per share. Hartmarx's yearly dividend is estimated at $1.10 per share. If you owned 100 shares, you'd receive $110 in dividend payments each year, probably in quarterly payments of $27.50.

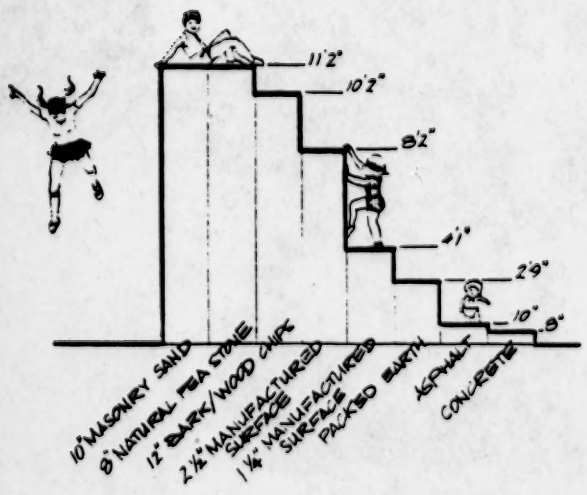
Sometimes the dividend column for a company is blank, indicating that the company doesn't pay cash dividends.


52 Weeks
Yld
Vol
Net
Stock
Div
% PE
100s
Hi
Lo
Close
Chg
LaQuintaPtr LQP 2.00 15.1
LaZ Boy LZB .48 3.1 (11)
LacledeGas LG 2.20 7.5 9
Lafarge LAF .40 2.8 10
LawsonSec LWS 17
LeaseFinan LFC .72 4.8 11
Landmark LZ .15 3 7
Lanier LAW .52 4.3 9
Lawter LRI .48 2.9 16
LeeEnt LEE .64 2.3
LeggMason LM 24 2.0
LeggettPlat LEG 17
Lehman LEH 6 17
LevitzTech LVI 3
Liz Claib
Loews
Logicon
LomasMtg
LoneStar
LongDrug
LongIsland
LongsDrug
LoneStarInd
LoneStarSteel
LoneStarTech
LoneStarTx
LoneStarTx pf
LoneStarTx pr
LoneStarTx wt
LoneStarTx wt
LoneStarTx wt

Home Playgrounds

I wanted to build a backyard play structure for my son and his friends, not buy one. But when I began looking for books to help me out I was disappointed. Then I found ***Harrowsmith****'s all-encompassing guide. There are many other books, but this one is head and shoulders above the rest.*

Beginning with a very helpful discussion of play in general, the book then gets down to helping you design a play space for your yard, providing detailed guidelines on how to design and build all the components. The book's coverage of safety, materials, building techniques, designing for growing kids and designing for small city lots all helped me to build a very sturdy and often-used play structure. And I love it when people ask: "You built that all by yourself? Without a kit?" —Keith Jordan



Surfaces vary in their abilty to cushion falls. For instance, a child could be hurt falling from an 8-inch height onto concrete but can safely fall as far as 11 feet onto 10 inches of masonry sand. Whatever the ground cover material, it should extend at least 6 feet in all directions from the edge of a play frame.

Home Playgrounds

Merilyn Mohr
1987; 144 pp.

$15.95 ($17.70 postpaid) from Harrowsmith, Ferry Road, Charlotte, VT 05445; 800/344-3350 (or Whole Earth Access).

Encourage quiet, creative play as well as the rough-and-tumble variety by adding benches to the backyard playspace. Reading and drawing take on a new perspective when a child is tucked in a favourite corner of the yard, surrounded by the stimulating sights and sounds of outdoors.

City Safaris

Getting kids to be more aware of the world outside their classroom doesn't necessarily require a country setting or park; cities are amazingly rich in detail if you look closely. This book — a teacher's aid, really — prescribes a group of activities proven to engage young folks as they explore an urban landscape. The suggested games may seem a bit overstructured, but city dwellers know that without strong focus, things seem to get dissipated in the hustle and bustle. Looks good to me. Plenty of nourishment for adults, too. —J. Baldwin

•

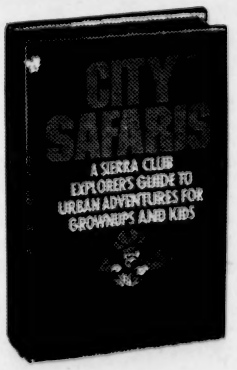
Think of city streets as diamonds in the rough, as places that hold hidden treasures for those willing to scratch the ordinary-looking surface. To help your kids unearth your city's treasure, organize city streets treasure hunts or conduct surveys of everything from bumperstickers to bumblebees. This chapter offers suggestions that you can add to or adapt to any size or age group in any city neighborhood.

Except for the occasional horse, the largest animal you and your kids will find on your urban safaris are the two-legged variety. These creatures built the cities and towns and often think they are the only ones living there. Just as the previous chapter helped you explore plants and wildlife, this one and the following chapter provide games, surveys, and suggestions for investigating the human life in your neighborhood.

•

Can you tell what time of day it is by street sounds alone?

You can concoct many games using rubbings, including guessing mystery rubbings from around the neighborhood.



City Safaris

Carolyn Shaffer and Erica Fielder
1987; 185 pp.

$9.95 ($12.95 postpaid) from Sierra Club Store Orders, 730 Polk Street, San Francisco, CA 94109; 415/923-5500 (or Whole Earth Access).

Gun-proof Your Children

If you have children, it is your responsibility to buy, read, absorb and apply what is in this book. If you know people with children, give them a copy. Ayoob is one of the leading experts on firearms and personal protection in the world. Techniques and principles he has developed and refined are being taught to police officers, special forces units and interested civilians all over the world.

This booklet is the ONLY source I know of that offers a balanced and realistic view of children and guns and, more importantly, does describe a way to gunproof your children. Recent events, and perhaps hysteria, with the accidental shootings in Florida and the assault-rifle controversy, make this thin volume especially timely and useful. —Steve Bell

•

The bottom line is this: YOU CANNOT CHILDPROOF YOUR GUNS. Firearms are designed to be used by conscripted soldiers, and an unspoken criterion of their design is that they be operable even by an idiot under stress. A halfway intelligent child given time at their leisure to play with one will eventually figure out how to bypass any safety mechanism, load, and shoot the gun.

In any case, none of the child-proofing techniques are going to work when your kid is at a playmate's house, and suddenly, little Johnny Neighbor says, "Look, I've got my Dad's real gun . . . "

The answer comes down to one stark and basic truth. If we cannot keep our children away from guns, if we cannot make every gun they might ever come near childproof, only one solution remains.

Instead of childproofing guns, we must gunproof the children.

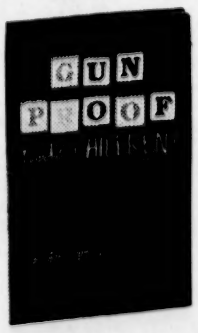
•

Make it clear to your children that they are NEVER to touch a real gun when you are not present. At the same time, make it clearly understood that any reasonable request to handle (not "play with," but *handle*) guns *in your* presence will be answered in the affirmative. The forbidden fruit is now pulled out by its roots.

•

My daughter has no inclination to be a carpenter, but knows how powersaws operate; she doesn't intend to be an electrician, but she knows the dangers of electricity; she has no plans for a medical career, but she is learning first aid.

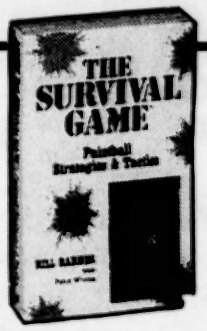
All those things, like the gun, are a part of everyday life in America. I wanted my child to be able to recognize any dangerous thing that might threaten her, to be ready to cope with any potentially threatening situation. Thus came her knowledge of powersaws and electrical outlets and first aid . . . and of the gun.



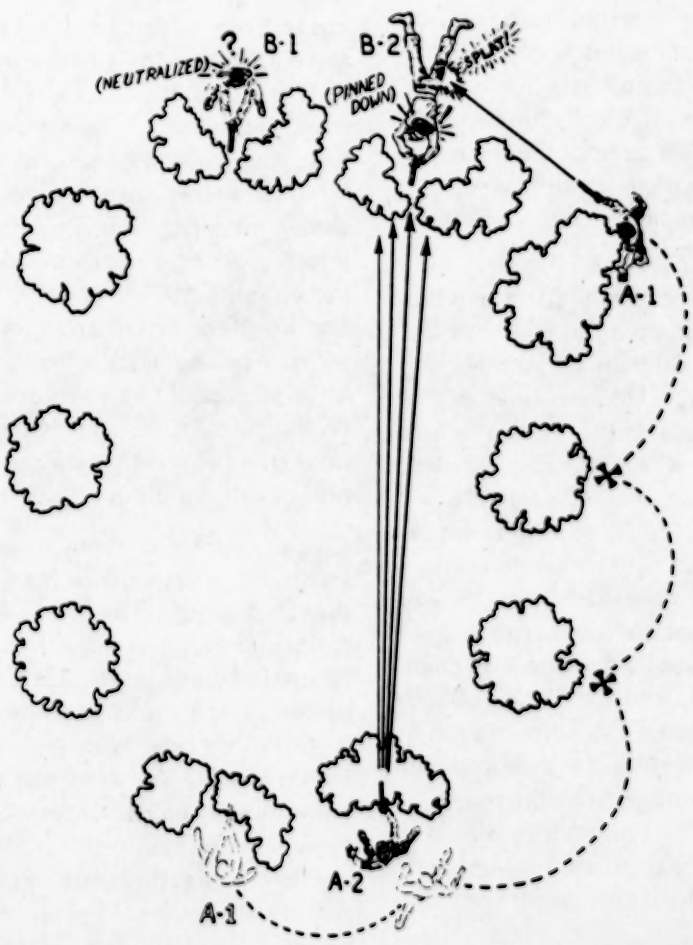
Gun-Proof Your Children
Massad Ayoob
1986; 17 pp.
$4.95 ($6.95 postpaid) from Police Bookshelf, 70 Broadway, Concord, NH 03301; 603/224-6814.

The Survival Game

Also called paintball. You shoot grape-sized pellets of washable paint with air-powered guns. They hit with a pleasing and inarguable SPLAT! The colorful SPLAT! begs for games. No matter whether it's in good ole Capture the Flag, or in entirely new competitive ones (and there are many), players trained in strategies and tactics have a decisive edge. I've competed on teams with lesser stamina and inferior marksmanship which consistently won because of minimal attention to the group tactics taught in this manual, which is now the best book.
—Kevin Kelly



The Survival Game
(Paintball Strategies & Tactics)
Bill Barnes with Peter Wrenn
1989; 160 pp.
$10.95 ($12.45 postpaid) from Mustang Publishing, P. O. Box 9327, New Haven, CT 06533
(or Whole Earth Access).



•

Tactical Tip #3
At the start of a game, it's a sure bet that anyone in front of you, facing your direction, is an enemy. Blast him! As the game progresses, however, you must be more cautious so as not to shoot your own teammates, as well as keep a sharper eye out for enemy players sneaking up on you from behind.

•

The second big sin of rookie players is silence. They seem to lose their power of speech in the midst of heavy action.

Sure, there are many times in paintball where quiet and stealth are imperative. All experienced players recognize this. But, once a firefight is underway and the enemy is obviously aware of your position, talk it up! In order for your group of players to function as a team, there *must* be communication between members.

FRACTURE OF ANOTHER SORT

THERE'S A VERNACULAR term that likens the erect penis to a bone and, as a few ill-fated men discover, the comparison is apt in more than one respect: like an actual bone, a blood-engorged *corpus cavernosum* may sometimes break because it cannot bend. Nor does the similarity end there: like management of a fractured bone, management of a fractured penis, according to three Virginia urologists, is best guided by x-ray findings.

"A patient with a penile fracture is generally pretty embarrassed, so he'll make up some excuse for a presenting symptom, such as stomach pain," says Dr. Frederick A. Klein, assistant professor of urology at the Medical College of Virginia in Richmond. "When you go in to see him, however, he'll tell you the real problem: his erect penis was forcibly bent — in most cases during sexual intercourse — he heard a 'crack' or 'pop,' and his penis immediately detumesced and then swelled painfully and turned black and blue." Typically the penis is deviated to the side opposite the injury; if the left corpus cavernosum is ruptured, for example, the penis will be deviated to the right.

If the appearance of the penis and the patient's account suggest a serious injury, the first possibility to consider is urethral damage. Find out whether the patient has blood in the urethra or has voided blood, which indicates urethral laceration, or has voided normally, which rules it out. "If he hasn't voided, you can wait an hour or two in hopes that he will," advises Dr. Klein, "or you can do a retrograde urethrogram. Inject 50 ml of an iodinated contrast medium up the urethra and take AP and oblique x-rays. If you see gross extravasation, we recommend putting in a suprapubic catheter for urinary diversion and letting it heal. If the urethrogram shows only minor extravasation, we treat with urethral catheter drainage for five to seven days."

Treatment of the penile fracture itself can be surgical or conservative — and the choice is a controversial one. Dr. Klein bases his decision on the severity of the injury, as indicated by contrast studies of the corpus cavernosum. "If a corpus cavernosogram shows extravasation of contrast material, there's a significant tear in the *tunica albuginea* that encapsulates the corpus cavernosum and the injury ought to be surgically repaired; otherwise, blood will go out of the corporeal body every time the patient gets an erection and eventually he'll wind up with an infection or so much scarring that the penis will be curved or deformed. If there is no extravasation, you can treat the injury conservatively."

Although corpus cavernosography is an underutilized technique, it's extremely simple and fairly benign and should be standard procedure in penile fractures, says Dr. Klein. "To perform it, first take an oblique scout film of the pelvic area and penis. Cleanse the penis with povidone-iodine and anesthetize the injured corpus cavernosum with 1% lidocaine. Load a 21-gauge butterfly needle with 70 ml of half-strength iodinated contrast medium and insert it into the corpus cavernosum — you know the needle's in the corporeal body when you get a return of blood. It's best to inject the contrast medium under fluoroscopy because then you can stop as soon as you see a leak. Otherwise, take one static film during the injection and another after injecting 50 ml. Reposition the patient in the opposite oblique position, inject another 10 or 20 ml, and take another x-ray. Wash out the contrast with 50 ml of saline, wait 10 minutes, and take a final supine AP film. A rupture will appear as a filling defect on early films and as extravasation on washout films."

Corpus cavernosography determined treatment in three penile fracture cases that Dr. Klein and Drs. M. J. Vernon Smith and Norman Miller report in the *Journal of Trauma* (vol. 25, 1090). Two patients with negative cavernosograms were treated conservatively and one with a positive film was treated surgically; all now function normally. The investigators also report 14 traditionally managed cases gathered by questionnaires sent to other Virginia urologists: all five patients treated surgically have normal erections but two of the nine treated conservatively have curvatures. That fits the picture usually seen in the literature, say the investigators, and it illustrates the problem with basing treatment on a clinical diagnosis. "Surgery gives uniformly good results but is unnecessary in many patients," says Dr. Klein. "Conservative treatment without radiologic assessment results in a high incidence of late complications — scarring, secondary Peyronie's disease, calcification of Buck's fascia, penile deformity, and resultant problems with intercourse."

The only contraindication to corpus cavernosography is allergy to the contrast medium. Complications are rare. "Some people believe that the contrast material can cause scarring," says Dr. Klein, "which is the reason for diluting it. There isn't much data on that and it's hard to say that any fibrosis isn't a result of the injury. Hematoma at the injection site is possible but unlikely."

A patient whose tunica albuginea is found to be intact goes home with ice packs, pain medications such as acetaminophen with codeine, antibiotics, and amyl nitrate to keep him from getting erections. He's instructed to avoid intercourse until his penis heals and to report back if his hematoma enlarges. Splinting the penis and giving anti-inflammatory drugs are often advocated but Dr. Klein believes they're superfluous.

Repair of a torn tunica albuginea is straightforward — in part because corpus cavernosography not only demonstrates tears but reveals their location and extent as well. With the patient under general or regional anesthesia, the surgeon makes a circumsizing incision, strips the skin of the penis back, evacuates the hematoma, and debrides and repairs the tunica albuginea. If the patient has severe urethral damage, urinary diversion can also be accomplished. Cephalosporin coverage is provided before and during the operation and for three or four days afterward. "Most patients who don't have urethral damage go home after a day or two and return to work in a few days. We give amyl nitrate in the post-operative period because an erection might rerupture the corpus and we recommend no intercourse for a month," Dr. Klein says. "Patients who do have urethral damage stay in the hospital three or four days. They're discharged with a suprapubic catheter in place and restudied by cystography in 7 to 10 days. The catheter can usually be removed in the office and the patient resumes his regular activities within a month." ■

Reprinted with permission of Emergency Medicine *magazine, Cahners Publishing Co.*

A Doctor's Guide to Men's Private Parts

Everything you wanted to know but were too embarrassed to ask (unless you live in California where such things are discussed in newspaper ask-the-Dr. columns). I'll admit that I didn't know a lot of this stuff, of which some is fear-allaying, some is fear-bringing, and some makes you want to roll up in a ball on the floor, yeeking. Curious ladies will find out a few things here, too, as will those unfortunate young men whose school board doesn't think they should know themselves.

—J. (yeek!) Baldwin

•

For a man in doubt, a test of whether or not he can still get an erection is to learn what happens at night. A simple but effective method is to tape postage stamps around his limp penis and see in the morning if the stamps have been separated by an erection. A more elaborate "snap gauge" is available commercially, but stamps will do as well.

•

Drips after urination There is an inescapable truth in the old verse that goes, "No matter how you jump and dance, the last few drops go in your pants." It's a circumstance called postmicturitional dribbling, and that's the way it is.

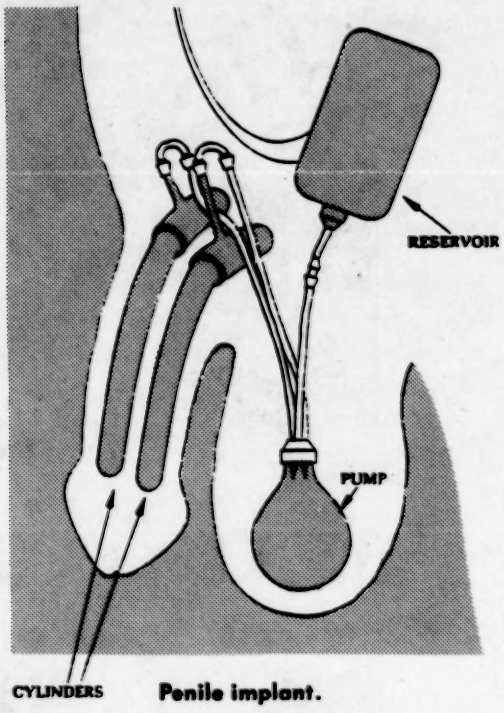
Here's an experiment you can conduct yourself. After voiding, apply gentle upward pressure under the base of the penis. In most cases the pressure will release those last few drops.

•

Implant operations for both solid and inflatable prostheses are now relatively routine. In fact, the solid implant may be performed on an outpatient basis; hospitalization overnight is required for an inflatable implant. In either case, sexual relations must be suspended until approved by a doctor, usually after four to six weeks. Other than slight post-operative discomfort for a short time, implants are popular and men have few complaints.

A Doctor's Guide to Men's Private Parts
James H. Gilbaugh Jr., M.D.
1989; 118 pp.

$9.95 ($11.45 postpaid) from Crown Publishers, Inc., 400 Hahn Road, Westminster, MD 21157; 800/733-3000 (or Whole Earth Access).



Penile implant.

Products for the Visually Impaired

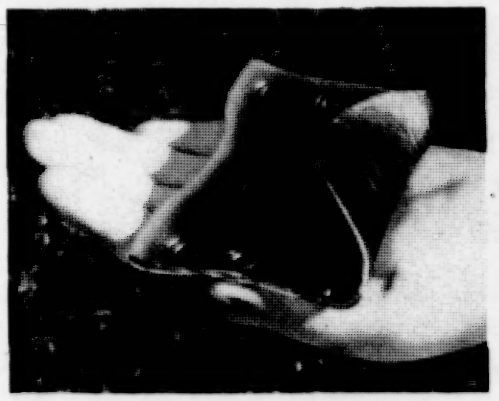
This catalog is a gold mine for the visually impaired. Most of the tools listed are electronic — you'll find computer-age technology at its most inventive and humane here. There are learning aids for children, talking computers, laser canes. Even if you're fully sighted, you might find something to interest you — like the Talking Bridge Challenger (a bridge game anytime, even if you're alone), or one of a wide assortment of magnifiers — twelve pages of them. I was intrigued by the TV Privatear, a Walkman that pulls in the audio of TV channels 2 through 13, plus FM radio, and U.S. government weather forecasts.

—Corinne Cullen Hawkins
[Suggested by John Benecki]

LS&S
Catalog **free** from LS&S Group Inc., P. O. Box 673, Northbrook, IL 60065; 800/468-4789.

•

WORD-TALK
Talking Word Processing Program
Word-Talk is a full-featured word processing program that uses synthesized speech as well as the screen. Each key typed can be spoken aloud — can be read back in full words, lines, complete sentences or in its entirety. . . .
IBM PC, PCxt and other PC Compatibles
Model 68-S1000-1 $245.00 plus $5.00 p/h
Apple IIe & IIc Model 68-S2000-A
$195.00 plus $5.00 p/h

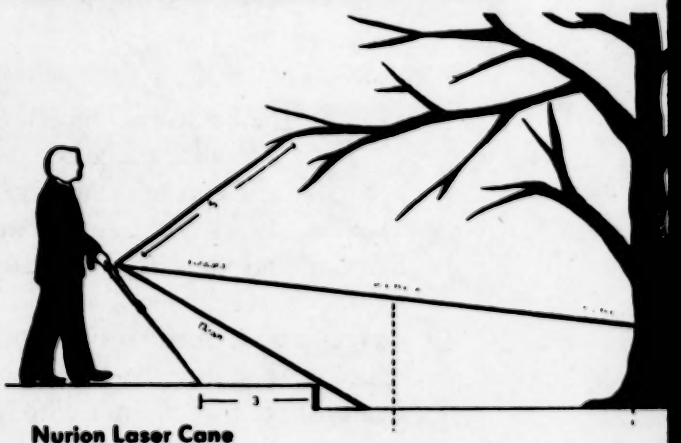


▲

MINI-BEEPER gives visually impaired new opportunities for recreation
Innovative technology — Mini-Beeper is designed to offer new ways for mobility, recreation and obstacle location. Beeping allows visually impaired to follow sound to play tag, identify obstacles, or indicate goal line in running race. A rugged dependable device — it can be attached to surfaces by using Velcro or double-stick tape. Enclosed in a leatherette pouch with velcro closed top flap. Raise flap for easy access to on/off beeper switch. Uses one 9 volt battery (included). 30 day warranty.
Model 109-MB-1 $22.95 plus $2.50 p/h

•

The Nurion Laser Cane is an amazing electronic aid for orientation and travel. It relays simple "go, no-go" information. The absence of a signal indicates a clear path telling the user to "go". The presence of a signal indicates an obstacle, meaning "no-go". Laser Cane is the only electronic travel aid which provides downward information — and warns user of drop-offs, steps, curbs, manholes, etc. The amazing Laser Cane operates with three lasers that send out invisible beams of light. The beams detect drop offs and obstacles at different heights and distances. . . . There are three distinctly different audible tones that correspond to the upper beam (high pitch), straight ahead beam (middle pitch), and downward beam (low pitch). If either the upper or forward beam strikes an object in its path, the light is reflected back to an optical receiving unit and the corresponding tone is given off to warn user. The downward beam produces a low pitched signal when beam is blocked or interrupted. In addition to the audible signals, a vibrating unit known as the tactile simulator signals the index finger when there is an obstruction straight ahead. . . .
Model 118-ND-7 $2,975 plus $25.00 p/h



Nurion Laser Cane

Healing Remission and Miracle Cures

by Brendan O'Regan

The Institute of Noetic Sciences has sponsored a lot of work on the mind/body relationship and its importance in health. During the 1970s, for example, we supported people like Carl and Stephanie Simonton, who were working with terminal cancer patients using psychotherapeutic techniques, meditational and guided imagery approaches, biofeedback and other techniques to demonstrate that the mind/body relationship was indeed important and could affect the course of illness and disease. In the early 1980s we at Noetic Sciences realized that while we had been funding practitioners of alternative techniques in medicine who demonstrated effects, we weren't really getting at the mechanisms of these effects. We weren't getting at how the connection between mind and body is mediated, or "What are the mediating pathways?" as the question would be asked in scientific circles today.

So we started a program called "the Inner Mechanisms of the Healing Response." One of the premises of the program is based on the observation that in medicine, or in science generally, progress occurs when it is recognized that certain seemingly disconnected things are acting together and forming a system. For example the circulatory system, the nervous system and the immune system were not recognized as systems until people gradually realized that they were indeed working in coordination as systems.

The Placebo Effect

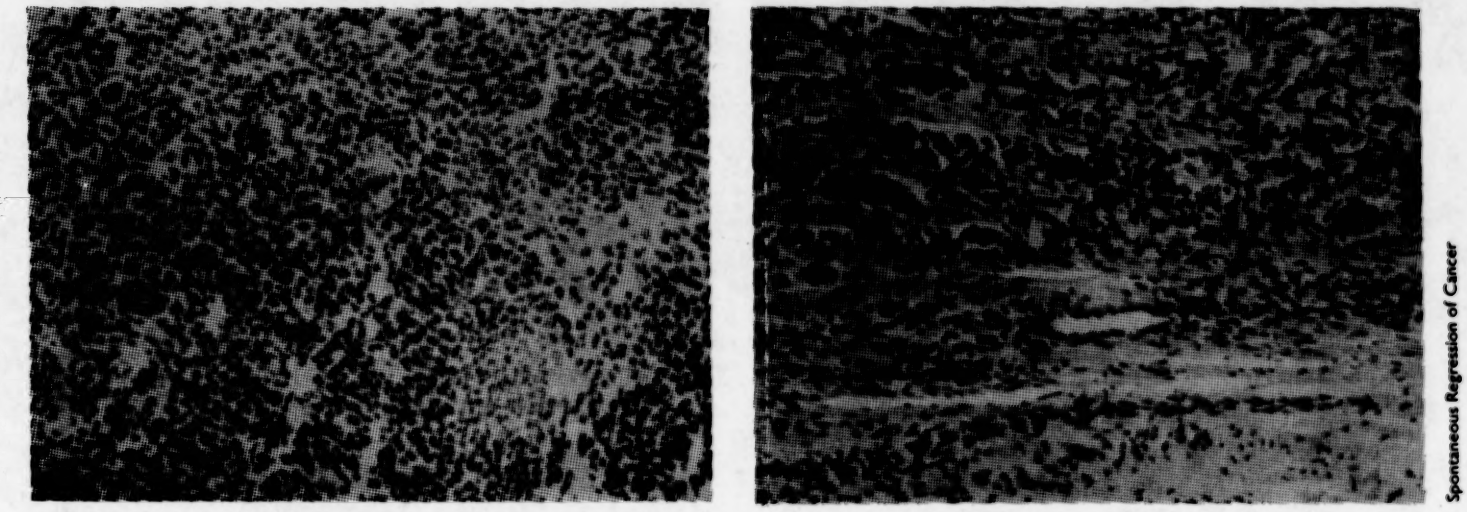
We noticed that there were a lot of sporadic data "all over the map" about healing. Take for example the placebo effect in medicine. The placebo effect is one of those annoying things, from some points of view in medicine, that says that some people — approximately 35 to 40 percent — will get better when given a sugar pill or an inert substance and told that it is a drug that will help them. Some of their responses can be fairly modest, such as the relief of pain. Many people say, though, that the pain is a subjective phenomenon or psychosomatic; so they're not terribly impressed by that result. Other examples are more dramatic. For example, in the 1950s it was common to perform

---

Just to set the record straight: I believe in miracles. Especially in healing.

The miraculous may have nowhere to go except to take refuge in healing. On the other hand, Brendan O'Regan argues that the miraculous may be the last undeciphered Rosetta stone for true scientific understanding of health and sickness. He is at work on an eight-part PBS documentary called "The Healing Mind," about humans trying to understand the power of healing throughout time and cultures. Currently he serves as Vice President for Research at the Institute for Noetic Sciences, an independent and creative crew of investigators located a block down our waterfront Gate Five Road, Sausalito. He delivered this as a lecture before members of the Institute in Washington, DC, on December 5, 1986. It appears here slightly edited, omitting a few case histories detailed in the original talk.

—Kevin Kelly



Spontaneous Regression of Cancer

(Left) photomicrograph of a biopsy specimen of a cancerous lymph node. The cross-section displays little structure in the tissue. (Right) a second biopsy specimen two years later. The chaotic tumor elements have disintegrated, revealing the more layered organization in normal tissue. The cancer has undergone regression.

a certain kind of surgery to relieve the pain of *angina pectoris* (heart). At that time some experiments were performed which could not get by a Human Subjects Review Committee today, I assure you. In these experiments patients with that disease were cut open and then simply sewn back up again. Those patients reported just as much relief from *angina pectoris* as the people who'd had the full surgery. So it turns out that surgery for *angina pectoris* produced a placebo effect.

There's another intriguing example of that from the *World Journal of Surgery* (1983), which reported on the test of a new kind of chemotherapy. As is often the case in such tests, they had an experimental group that received the chemotherapy, and a control group that received a sugar pill or an inert substance. One of the effects of chemotherapy that we're all familiar with is hair loss — people expect to lose their hair when given chemotherapy. In this study 30 percent of the control group — given placebos — lost their hair. That's a very physical effect! There's got to be some kind of mediating pathway for it. In fact, it's been named the "nocebo" effect, as opposed to the placebo effect which means "I shall please." This is not pleasing!

Those who think of placebos as only having modest, inconsequential and subjective effects should look at some of these data because there are, definitely, quite direct physical effects of placebos. In fact less-kind people say that the history of medicine is the history of the placebo effect, at least until the discovery of drugs or antibiotics, because many of the substances that were administered before the 1930s have since been found to be pharmacologically inactive or ineffective.

But even recently within the realm of chemotherapy there are interesting effects. Dr. Bernard Siegel at Yale told me a story about a chemotherapeutic agent called cis-platinum. When cis-platinum came out, it was greeted with a great deal of enthusiasm. Doctors were getting 75 percent effectiveness from administering cis-platinum to their patients. But over time, doctors further removed from the initial enthusiasm would administer the chemotherapy in a sort of "ho-hum" routine way and the effectiveness rate dropped down to about 25 or 30 percent.

Given these physical effects of placebos, one wonders what can be going on. There must be complex pathways between mind (belief systems) and body.

Multiple Personality

Then we at the Institute started investigating another phenomenon which had intrigued me for some time — multiple personality, which is exhibited by people who have been severely abused, physically and sexually, as children. Dr. Frank Putnam of the National Institutes of Health (NIH), one of the country's experts on that subject, has found that electroencephalograms (EEGs) of people who go from one personality to another will change as dramatically as though the electrodes had been taken off from one person and placed on another. The difference in brain activity is that great. Most intriguing is that some of these people will be allergic to a drug in one personality and not allergic to it in another. Some cases have been reported of women who've had three menstrual periods each month because they had three different personalities, each with her own cycle. A more peculiar situation that I have difficulty accepting — I've heard of four cases, but I've never witnessed one — is that of eye color changing between personalities.

What all of this implies is that there is an extraordinary plasticity in the relationship between mind and body. It's very interesting to examine this in multiples because it involves the same biology, the same genetics, the same physical being. Some, by the way, take the view that there is a connection between temporal-lobe epilepsy and multiple personality; they say that completely different brain regions are being activated, so different sets of instructions are being sent out. But, indeed, isn't that what we want to happen when we're trying to get someone to change illness in the direction of healing? Following this line of

reasoning we decided to fund a study at NIH — it's ironic that Noetic Sciences gives money to NIH — to examine the immune systems of multiples while they change personalities. This study, which had not been done before, is now being conducted by Dr. Putnam in collaboration with Dr. Nicholas Hall at George Washington Medical School.

As all of this began to jell in my mind I thought, well, maybe there is something in addition to a nervous system and an immune system and an endocrine system — something like a healing system. Maybe it is a system that doesn't manifest itself unless challenged. Maybe it's a system that can lie dormant until confronted with stress, trauma, disease or illness of some kind. If that was so, then it would explain why it just isn't an obvious part of ourselves. As I was speculating along these lines, and about a year after I had written some notes about this, I found a statement from Norman Cousins in his book *Human Options*. He says:

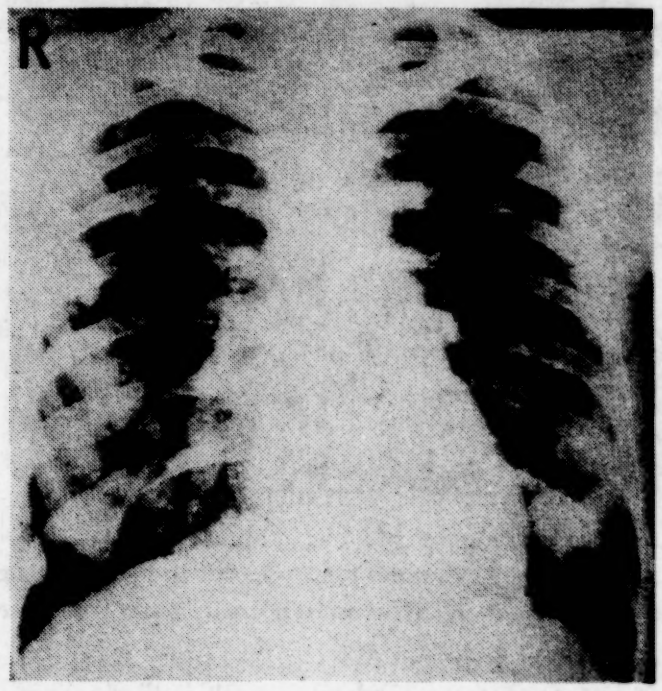
> Over the years, medical science has identified the primary systems of the human body, the circulatory system, digestive system, endocrine system, autonomic nervous system, parasympathetic nervous system, and the immune system. But two other systems that are central to the proper functioning of a human being need to be emphasized: the healing system, and the belief system. The two work together. The healing system is the way the body mobilizes all its resources to combat disease. The belief system is often the activator of the healing system.

So, I thought, I was not alone in thinking this way. We then asked ourselves, "How would we maximize the evidence of the healing system?" After all, this is not an accepted point of view. It's not taught in medical schools at all, I'm sure. We decided to look into a subject of which I'd heard rumors and anecdotal evidence for years — spontaneous remission.

Spontaneous Remission

Spontaneous remission is a phenomenon with a very curious history in medicine. The majority view is that spontaneous remission doesn't really happen — that it is, in fact, an artifact of misdiagnosis. According to this view the person never really had that disease, they had something else. This in itself is very interesting. If this turns out to be the case, then we should know the extent of it in medicine and attempt to get rid of it.

So a year ago we got busy on our computers and started going into the databases, and we now have assembled over 3,000 articles from over 860 medical journals in over twenty different languages. The article can be about as many as several hundred cases. As far as I know this is the largest compilation of data on spontaneous remission in the world. We will be publishing this work early in 1990, and have already completed a draft of the first volume, which is entitled *Remission with No Allopathic Intervention*. Some very interesting pictures emerge from this.



Spontaneous Regression of Cancer

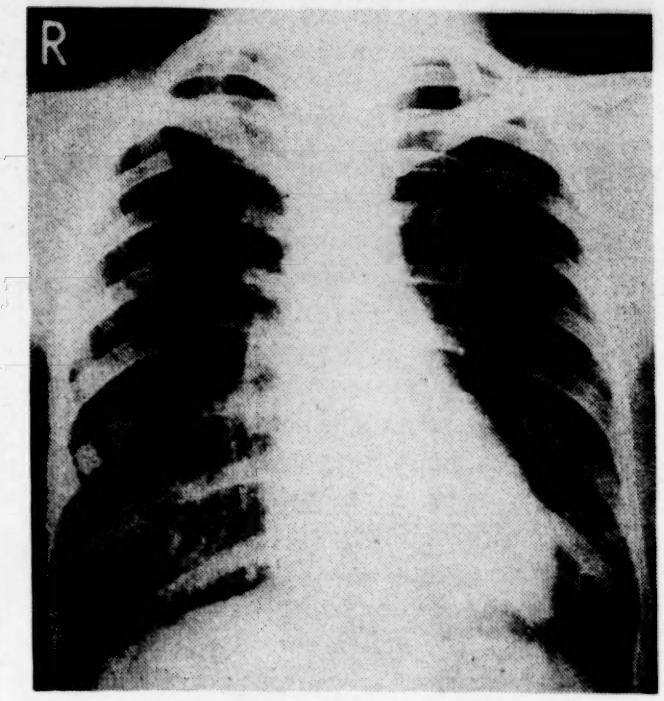
A 24-year-old female with multiple, plum-sized, sharply defined pulmonary metastases in both lungs, with heavier localizations in her right lung (displayed as white blobs on the film).

First of all, we have found cases of remission from almost every kind of illness, not just cancer. We've selected about 800 of the most striking examples of spontaneous remission for inclusion in Volume One of the spontaneous-remission bibliography. We have many cases of remission with no medical intervention at all. These are the purest ones, the ones that give us the strongest evidence that there is an extraordinary self-repair system lying dormant within us. These make up about one-fifth of what we have collected. Then if you go to the cases where there's inadequate medical treatment (in other words something was done for the person, but they did not receive a treatment that would be expected to cure them in any way — for example, a biopsy is not considered curative) — then you get about twice as many articles.

Let me say that many of the people who write these medical journal reports do so with a great sense of apology, because they seem to be saying to their colleagues, "Well, we really did diagnose this correctly; we thought that the x-rays might have gotten misplaced so we took them again; and we definitely found that this person really had the disease." Then you get the same story all over again when they go through the remission. In effect, they are saying: "The disease really did disappear. We re-did the tests several times and to our amazement, the tumor was completely gone."

Here's a case from *The Journal of Thoracic and Cardiovascular Surgery* (1954), a case of spontaneous regression of an untreated bronchiogenic carcinoma. If you'll bear with me through the technical detail in the following report, I think it will give you some sense of how thorough these reports are.

> A fifty-nine-year-old white man was admitted to the George Washington University Hospital on May 19,



Nine months later: this x-ray reveals that her lung fields are completely clear of lesions. An earlier cough was gone and the woman felt fine.

1947. The patient had been in good health until September of 1946 when he first noticed an increase in a chronic cough which he had had for years. In addition, he gave a history of malaise and increasing dyspepsia of two months' duration, and an 18-lb. weight loss over a period of six months. The patient suffered from chronic bronchitis of about 20 years' duration. He had smoked from two to three packages of cigarettes daily for many years. X-rays of the chest revealed an opacity in the right lung field at the level of the third and fourth intercostal spaces anteriorly. On July 20, a right thoracotomy was performed which revealed a carcinoma of the lung with involvement of the right helium and invasion of the mediastinum at the level of the inferior pulmonary artery. A biopsy of the mass was taken and since the lesion appeared inoperable, the chest was closed. Microscopic examination of the tissue revealed an epidermoid carcinoma.

During the post-operative period, x-rays of the chest revealed progressive clearing of the pulmonary lesion in the right lung. This became particularly apparent about six months after the exploratory thoracotomy. The incredible behavior of the pulmonary lesion naturally aroused suspicion that there had been a mistake made in the histologic diagnosis and perhaps a mislabelled specimen accounted for an erroneous diagnosis. Accordingly, new sections were made which again revealed epidermoid carcinoma.

The patient was readmitted to the hospital May 19, 1952, exactly five years after the original admission. A careful re-evaluation of his entire life history was undertaken to obtain any pertinent facts which could have influenced the behavior of the lung cancer. Nothing of significance could be found except that for four or five years he had been employed as a linotype operator with exposure to noxious fumes. This ultimately led him to change his occupation. *[This is all you now hear about the patient as a person.]* Following the operation in 1947, he took two halibut liver oil capsules daily for a considerable period of time, four vegetable compound tablets daily, an occasional barbiturate for sleep and vitamin B-1 tablets. The vegetable compound tablets were analyzed and were found to contain asparagus, parsley, watercress and broccoli. The almost complete disappearance of the lesion in the right lung was constant, corresponding to x-rays of the past four years.

Notice that this patient was operated on and a biopsy was taken. However, no attempt was made to remove the tumor since it was regarded as inoperable. This is categorized as "no allopathic intervention" from a technical standpoint – though when one learns that biopsy procedures alone can appear to stimulate remissions, one wonders if this categorization will remain appropriate.

I could quote many more of these cases but for brevity I'll tell you just a few of the patterns we've seen in the literature. One of the patterns is that you rarely hear anything of the patients as persons – what they believe, what they do, what they feel. It's just not included. That's understandable in the context of the time that these papers were written and the attitude in medicine then. But when you read enough of them, after a while you start to notice a mounting symphony of the absence of the person. I remember one paper by Dr. Weinstock in New York about a woman who had cervical cancer that had metastasized throughout her body. She was considered beyond treatment and beyond help. As the paper continued it said, "And her much-hated husband suddenly died, whereupon she completely recovered." So you say to yourself – wait a minute, shouldn't we follow up on these kinds of things? One is left wondering what might be behind that kind of statement.

Our Remission Project has uncovered other interesting work in many other countries. We have about 250 papers in other languages, including Japanese, Swedish, German, Italian, Hebrew. In Sweden and Japan, researchers have been removing plasma from people in remission, particularly with hematologic (blood) diseases, and have been injecting it into other people and, in some cases, are getting remission; this suggests there are blood-borne factors that I believe can one day be isolated from people in remission. This is yet another reason to gather data on these people.

Another quite different aspect of remission is the cases reported involving psychological and spiritual phenomena. Here is part of a report from an Australian physician, Ainslie Meares, who unfortunately died in September, 1987. This case involves the regression of osteogenic sarcoma metastases associated with intensive meditation.

The patient, aged 25, underwent a mid-thigh operation for osteogenic sarcoma 11 months before he first saw me, 2½ years ago. *[This report was written in 1978.]* He had visible bony lumps of about two centimeters in diameter growing from the ribs, sternum and the crest of the ileum and was coughing up small quantities of blood in which he said he could feel small pieces of bone. There were gross opacities in the x-ray films of his lungs. The patient had been told by a specialist that

he had only two or three weeks to live, but in virtue of his profession he was already well aware of the pathology and prognosis of his condition. Now, 2½ years later, he has moved to another state to resume his former occupation. This young man has an extraordinary will to live and has sought help from all the alternatives to orthodox medicine which were available to him. These have included acupuncture, massage, several sessions with Philippine faith healers, laying-on of hands, and yoga at an Indian ashram. He had short sessions of radiation therapy and chemotherapy, but declined to continue. *[This would be classified more as a case of inadequate treatment, in technical terms.]* He also persisted with the dietary and enema treatment described by Max Gershon, the German physician who gained some notoriety for this type of treatment in America in the 1940s. However in addition to all these measures to gain relief, the patient has consistently maintained a rigorous discipline of intensive meditation. He has, in fact, consistently meditated from one to three hours daily. Two other factors seem to be important. *[Meares, by the way, is one researcher who describes more about the patient and less about the disease.]*

He has had extraordinary help and support from his girlfriend who more recently became his wife. She's extremely sensitive to his feelings and needs and has spent hours in aiding his meditation and healing with massage and laying-on of hands. The other important factor would seem to be the patient's own state of mind. He has developed a degree of calm about him which I have rarely observed in anyone, even in Oriental mystics with whom I have had considerable experience. When asked to what he attributes the regression of metastases, he answers in some such terms as "I really think of it as our life, the way we experience our life." In other words, it would seem that the patient has let the effects of the intense and prolonged meditation enter into his whole experience of life. His extraordinary low level of anxiety is obvious to the most casual observer. It is suggested that this has enhanced the activity of his immune system by reducing his level of cortisol.

So some clues come occasionally from people who are studying the mind/body relationship in relation to remission. But by far the largest number of cases do not involve this kind of information. You're simply told that people survived — period. In 1985 we went to the National Tumor Registry, which is operated by the National Cancer Institute. This registry has eleven centers around the country, which keep track of all the incidences of tumors. If a patient goes to a hospital and cancer is diagnosed, the Tumor Registry is informed of the type of tumor, the patient's age, race, sex, and various other details. That's how the records on the incidence of cancer are built up. They don't track remission, however, and they don't even really track long-term survival anymore. But even so I went to the San Francisco Bay Area Tumor Registry, which covers the five Bay Area counties, and I said "Look, we're interested in remission." They said, "No, no we don't have information on that here." And I said, "Well, how long do you keep track of patients? Do you keep track of them for five years, or ten years?" They said, "We keep track of them until they die." I said, "Oh? In that case, you could look for long-term survivors." They said, "Yes, we could." Their database had been computerized in 1973, and I was talking to them in 1985, so I said "Why don't we look in your records for people who were told between 1973 and 1975 that they had a terminal cancer, that it was not just cancer at a primary site, that it had metastasized throughout their body. Look in your records

Spontaneous Regression of Cancer

Spontaneous regression of cancer nodules. Left, multiple nodules on the boy's back at age seven months. (Nodules have been colored to increase contrast in photo.) Center, significant reduction of nodules by the age of six years. Right, complete remission at age 12 years (September 1958).

now in 1985 and see if any of them are still alive." They said, "Fine, we can do that very easily." They went into the database and came back with 100 names: 100 people are still alive ten years past a terminal diagnosis. We agreed that we'd better make sure these people were still alive; you know, this whole issue of just exactly when people are really dead is rather tricky because some people are still trying to collect social security, and there are strange things involving insurance claims. This is a kind of netherworld I hadn't penetrated before. They said "We will verify that they are all alive."

They were then successful in verifying that 89 of these individuals were still alive. These people had all different kinds of cancer. What startled me the most was that there were two cases of pancreatic cancer, which is normally very lethal. So we are now attempting to get the release of their names and permission to go talk to them.

One of the things Caryle Hirshberg noticed was that when people who had kidney cancer had the kidney removed, the metastases from the kidney to the lung — the pulmonary metastases to the lung — would frequently disappear. This is not considered terribly surprising. You're removing the primary site of the cancer, so maybe it is not so strange that the area to which the cancer had spread would heal. But then we began to notice that when some patients simply had a biopsy of the kidney, their pulmonary metastases would disappear. In these cases there is no surgery to remove the cancer. Only the amount captured by a little needle biopsy is removed. So there's some interesting relationship between the kidney and the lung and the simple act of biopsy. That's not a technically "clean" remission, but it says that biopsy can be part of the process of inducing remission somehow. When you intervene in one area, it sets up a process which can help in another.

Spiritual and Miraculous Healing

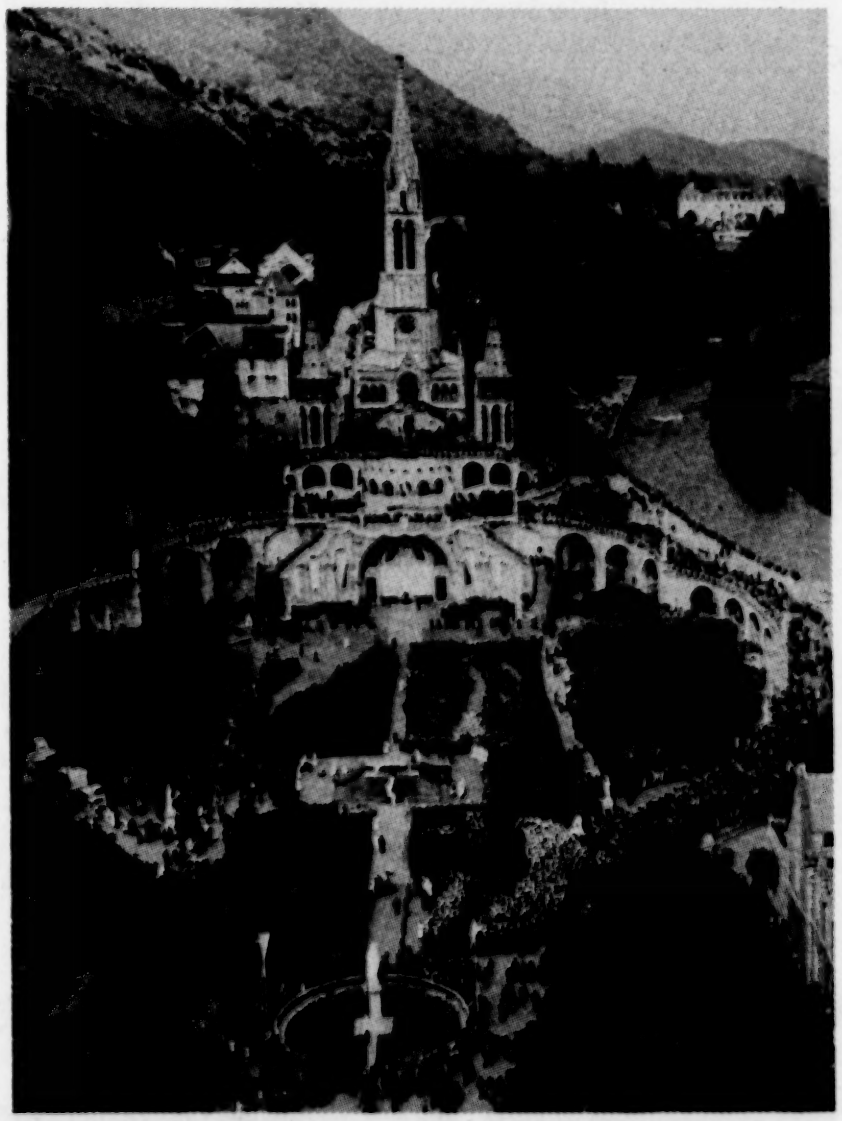
We then began to say, "Well, we've heard for many years about claims of spiritual healing or miraculous healing. We see these claims televised every night. What about these cases? Are these remissions, or are these something else?" I thought I should look into this in order to have a more complete perspective of the whole field. So I asked myself first, "Where will this have been documented in some way that I can make sense of?" Anecdotal claims are important because they tell us there is a territory to be investigated, but they are not evidence, really. Then I thought about Lourdes, in France, where an apparition of the Virgin Mary appeared in 1858.

Since then there have been approximately 6,000 claims of miraculous healing. Mind you, there have been millions of people going there, so this is not a high percentage we're talking about. Of those 6,000, only 64 have made it through the procedures of the International Medical Commission to be officially declared miracles. The Commission was organized in a fairly sophisticated form in 1947, and they have records since about the 1860s, varying in quality during the early period.

Let me tell you a little bit about the Commission's procedure, so you'll realize that it is not easy to be a miracle, at least from their point of view. I am quoting here from a paper by St. John Dowling in the *Journal of the Royal Society of Medicine* of August 1984:

> At present there are 25 members of the Commission: thirteen French, two Italian, two Belgian, two English, two Irish, one each from Spain, Holland, Scotland and Germany. *[Interestingly there are no members from the United States. I wonder about that.]* Then they have a wide spread of specialties. Four each from general medicine and surgery, three from orthopedics, two each from general psychiatry and general practice, and one each from radiology, neuropsychiatry, dermatology, ophthalmology, pediatrics, cardiology, oncology, neurology and biochemistry. Ten members hold chairs in their medical schools. All are practicing Catholics. Many are doctors who come regularly to Lourdes as pilgrimage medical officers, but some have little or no connection with the shrine. ►

The Happening at Lourdes



Shrine built over the small river grotto where St. Bernadette witnessed the visitation of the Virgin Mary in 1846 in Lourdes, France. Lourdes attracts millions of pilgrims a year; many of them are infirm. Any claims of healing at the shrine are referred to a "miracle committee" for authentification.

The "miraculous" cure of an Italian man named Vittorio Micheli, who visited Lourdes in May 1963 with a completely disintegrated hip. This earlier (1962) x-ray shows the absence of bone in his pelvic area caused by a malignant sarcoma. The ball of his upper leg was free-floating in a mass of soft tissue, rendered as gray mist in the x-ray.

If, after the initial scrutiny and follow-up, the Medical Bureau thinks that there is good evidence of an inexplicable cure, the dossier is sent to the International Medical Commission which usually meets once a year in Paris. The preliminary investigation of the data is made, and if the members agree that the case is worth investigating, they appoint one or two of their members to act as *rapporteur.* The *rapporteur* then makes a thorough study of the case, usually seeing the patient himself (or herself), and presents the material in a detailed written dossier circulated to the members before the meeting at which they will take their decision.

The report is then discussed critically, at length, under 18 headings, a vote being taken at each stage. In the first three stages, the Committee considers the diagnosis and has to satisfy itself that a correct diagnosis has been made and proven by the production of the results of full physical examination, laboratory investigations, x-ray studies and endoscopy and biopsy where applicable. Failure at this stage is commonly because of inadequate investigation or missing documents. At the next two stages, the Committee must be satisfied that the disease was organic and serious without any significant degree of psychological overlay *[their words].*

Next the Committee makes sure that the natural history of the disease precludes the possibility of spontaneous remission. *[In other words, they throw out all cases where a remission could have occurred because for them, remission is natural not supernatural. Their rejects become part of our database. Hence the importance of talking to them.]* The medical treatment given cannot have effected the cure. Cases ruled out here are those about which there cannot be any certainty that the treatment has not been effective. For example, a course of cytotoxic drugs would lead to the case being rejected even where the likelihood of success was small. *[So they're operating with a fairly tough set of criteria.]* Then the evidence that the patient has indeed been cured is scrutinized and the Committee must be satisfied that both objective and subjective symptoms have disappeared and that the results of investigations are normal.

The suddenness and completeness of the cure are considered together with any sequelae. Finally, the adequacy of the length of follow-up is considered. After this detailed study, the question is asked: "Does the cure of this person constitute a phenomenon which is contrary to the observations and expectations of medical knowledge and scientifically inexplicable?" A simple majority carries the case one way or the other.

I want to deal with one case in some detail so you get a feeling for what goes on in the more contemporary cases. First though, I would like to read you a little quote here from a paper by James Hansen that appeared in *New Scientist* in 1982 entitled "Can Science Allow Miracles?"

> A miracle is when something that cannot happen does anyway. It is not a question of the manifestation of hitherto-unknown natural laws, if there are such that multiply loaves and permit walking on water, but rather a temporary suspension of nature itself by some outside supernatural action. If this can happen, there is a problem. In science, exceptions do not prove the rule. Doing research at all means making at least a few basic assumptions: that nature is knowable, and that it is constant. Experiments can be done, and most important repeated. The genuine possibility of divine intervention as an unknown variable knocks the whole house of cards to pieces.

Let's see what you think of this particular house of cards, with respect to the case I have chosen to go into in some detail. This is that of a man named Vittorio Michelli. I will now quote from the official report of the Medical Commission:

> He was admitted in 1962 to the Military Hospital of Verona in Italy suffering from a large mass in the but-

After bathing in the spring at Lourdes, Micheli felt an immediate recovery of his appetite and resurgence of energy. Without medical intervention his hip began recalcification. This 1968 x-ray shows an almost perfect reconstitution of the hip joint. The definitive boundaries of bone in the lower pelvic area can be seen in the x-ray.

tock region limiting the normal range of movement of his left hip with leg and sciatic pain. After various unsuccessful therapeutic trials, radiological examination showed a structural alteration of the left iliac bone (osteolysis of the inferior half of the iliac bone and of the acetabular roof, amputation of the two rami of the ischium and gross osteoporosis of the femoral head) immediately suggestive of a malignant type of neoplastic lesion.

> At the end of May biopsy was taken. The exposure of the tumor had to be made beneath the buttock muscles and the various sections revealed that the specimen under consideration was a fusiform cell carcinoma. The sick man was then immobilised in a frame from pelvis to feet and sent during the month of June to a Centre for radiotherapy. Four days later he was discharged — without having received any therapy at all — and readmitted to the Military Hospital at Trente.
>
> There during the next ten months there was no specific treatment; medical, surgical or radiotherapeutic, in spite of the fact that there was radiological evidence of persistent bony destruction; progressive loss of all active movement of the left lower limb; progressive deterioration. *[In fact, the whole hip was being destroyed by the bone; it was being eaten away. He was literally falling apart — the leg was being separated, this mass was growing, and the actual bone of the pelvis was disintegrating.]*
>
> On the 24th of May, 1963 *[this is now approximately a year after his original diagnosis]* the patient left for Lourdes where he was bathed, in his plaster, several times.

Upon bathing he had sudden sensations of heat moving through his body, which characterizes this kind of healing. We're not sure what it means, but you hear about it. He had a sensation like that. When he arrived at Lourdes he couldn't eat and had lost vast amounts of weight. This information is all included in the report. After being bathed he felt an immediate return of his appetite and an amazing kind of resurgence of energy. They took him back to the hospital and, frankly, no one believed he felt better. Even people who let you go to Lourdes don't believe that it does anything, I guess! He started to gain weight and to be much more active. After about a month, his doctors finally consented to take his cast off and take another x-ray. They made an extensive report on what they found. In essence, they discovered that the tumor was getting smaller and smaller. It was regressing.

Then the tumor disappeared, and the bone began to regrow and completely reconstruct itself. Michelli was able to walk again two months after his return from Lourdes. I'll quote here from the report:

> A remarkable reconstruction of the iliac bone and cavity has taken place. The x-rays made in 1964, -5, -8 and -9 confirm categorically and without doubt that an unforeseen and even overwhelming bone reconstruction has taken place of a type unknown in the annals of world medicine. We ourselves, during a university and hospital career of over 45 years spent largely in the study of tumors and neoplasms of all kinds of bone structures and having ourselves treated hundreds of such cases, have never encountered a single spontaneous bone reconstruction of such a nature.

At the end of this report they say,

> Definitely a medical explanation of the cure of sarcoma from which Michelli suffered was sought and none could be found. He did not undergo specific treatment, did not suffer from any susceptible intercurrent infection that might have had any influence on the evolution of the cancer. *[Notice here that they are aware that infections can stimulate remission.]*
>
> A completely destroyed articulation was completely reconstructed without any surgical intervention. The lower limb which was useless became sound, the prognosis is

The hillside at Medugorje, Yugoslavia where six children first saw an apparition of the Virgin Mary in 1981. For years afterward they saw the visitation daily. Four of them still continue to see the apparition every day. (The other two were given their last "secret" as they grew to be teenagers.) During a visitation, Vicka, Jakov, Ivanka, and Marija are oblivious to flashes or other disturbances.

The Queen of Peace Visits Medugorje

> indisputable, the patient is alive and in a flourishing state of health nine years after his return from Lourdes.

There are sixty-four of these cases if you want to go into some detail, but I thought I'd pick just one and tell you about it.

There was a very intriguing paper published in the *Journal of the Royal Society of Medicine* in August of 1984. The author, St. John Dowling, did a follow-up study of thirteen of the people who had been cured at Lourdes to see how they are now. Nobody ever seems to talk to these people, and in contrast, I think I should jump on a plane and go interview them all! Of the thirteen, he found that eleven were still alive and well and healed, showing no signs of their original illness. Of the other two, one was dead because of an unrelated tractor accident.

At this point I thought to myself, well here are these interesting healings occurring apparently as a result of an apparition that appeared in 1858. Is there anywhere today where an apparition might be appearing, and if there is, are there extraordinary healings associated with that? I discovered that there is indeed a site in Yugoslavia where an apparition of the Virgin Mary has been reported every day since June 24, 1981. It's in the little village of Medjugorje about two-and-a-half hours inland, north of Dubrovnik. I went there myself in May of 1986.

I could talk to you for a long time about the apparition. Briefly: I learned there are six children, two boys and four girls, who see the apparition. It is not seen by everyone who is there. The purpose of the apparition, according to what it says to the children, is to bring peace to the world and to remind us of the need to become aware of God, in our own way. (These last four words are, by the way, making the Catholic hierarchy a little bit distracted because it doesn't suggest that everyone should become Catholic. Further there apparently was a bit of consternation in Medjugorje when a Moslem boy was healed.)

The children see this apparition every day around 6:30 to 6:45 P.M. It doesn't matter where they are, but typically they gather together in a room to share the experience or to be there together. I interviewed two of them, one of the boys and one of the girls.

I became rather rapidly convinced that these were kids whose lives had been dramatically changed by the experience of the apparition in ways that made me feel that I would never want to exchange places with them. They have no privacy, they are completely at the mercy of the millions of people going through there, they've been interrogated by the police, and the priest in charge has been put in jail and served 18 months of a jail sentence. The authorities don't quite know what to make of this and they put roadblocks around the village every weekend and try to track who's coming and going. So it's just a very complicated story.

I talked to the priest who was the children's spiritual director, Father Slavko, who is a Franciscan monk with a Ph.D. in psychology — which is not what you'd expect in a little village in the middle of nowhere, so to speak. He was intrigued that I was there to study healing because nobody, or very few, had come for that purpose. Most people come to pray and to hear what the apparition has to say about the danger the world is in, the need for world peace, and all of those kinds of basic questions. I said, yes I'm interested in all that too, but I want to know if there's healing happening here. And the answer was yes — there are some 250-300 reports. He let me see the various files. Some of them were very good reports, some of them were

very poor. So you don't regard this as much beyond anecdotal evidence.

One of the better cases was a Diana Basile, a woman from Milan, Italy, who had been diagnosed and treated under every kind of circumstance that you could imagine for multiple sclerosis. She arrived in a wheelchair, was in the apparition room with the children one evening, and while they were having the apparition experience, felt this sudden movement through her body and stood up and said "I can walk, I am healed!" And the priest said, "Kneel down and pray."

He just was not interested in the healing. She has since been in good health and her case is being monitored in Italy.

seemed to be when one is actually there during such an event. An EEG is never going to capture an apparition. But people were trying to do that.

In conclusion let me mention some interesting research coming now from the field of psychoneuroimmunology, that deals with the links between the brain, the mind and the immune system. We had thought that only communications that are mediated in the mind/body system by the brain were important. But recently other systems have been discovered to be important, too. The major one is the recently discovered neuropeptide system. I'll quote from a book that I would recommend reading. It's called *The Psychobiology of Mind/Body Healing* by Ernest Rossi, Norton Press. The last two paragraphs summarize

Marija and Ivan, two of the six children seeing the Virgin Mary during her daily manifestation.

There have been cases of people with remission from blindness, from cancers, from tumors, all sorts of things, and they are now beginning to send cases to the Medical Bureau at Lourdes, which isn't quite sure what to do with them. The Franciscan is saying that in his view, he can sometimes tell who will be healed. I said, "What do you mean? How can you tell?" He said, "It's very often the people who come and don't determinedly want healing. They come with an open mind and with the spirit of simply doing God's will. They may ask for healing but they have not come with this as the single-minded purpose of their trip."

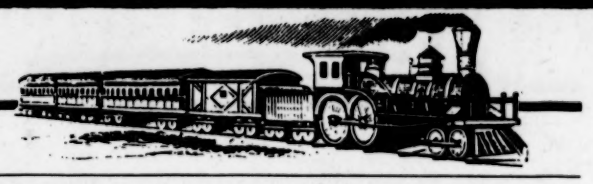
I was in the room with the children when they were having the experience of an apparition. I did not see the Virgin, in case you're wondering. But there was a very strange set of sensations that accompanied it. It was as though there was this incredible wave of feeling throughout the room that hit one in the solar plexus — An incredible kind of sadness that made people cry. It was a very intense thing that quietly takes hold of you. I was not told about that in advance, and I was sort of taken aback by it.

All kinds of things have been done to the children. A team of French and a team of Italian doctors measured EEGs, and took electro-ocular scans. They've done everything to these poor kids while they were having an ecstatic experience of the Virgin. Somehow I didn't expect to react by feeling how ridiculous this where I think we may go with this in terms of the science of mind/body healing.

> Thus the slower-acting but more pervasive, flexible and unconscious functioning of the neuropeptide activity of mind/body communication more adequately fits the facts of hypnotic experience than the faster-acting, highly specific and consciously generated processes of the central and peripheral nervous systems. If we were to use a computer analogy, we could say that the peripheral nerves of the central nervous system are hard-wired in a pre-set fixed pattern of stimulus and response, just as is the hardware of the computer. The neuropeptide system, however, is like the software of the computer that contains the flexible, easily changed patterns of information. The receptors and highly individualized responses of the neuropeptide system are easily changed as a function of life experience, memory and learning. Neuropeptides, then, are a previously unrecognized form of information transduction between mind and body that may be the basis of many hypnotherapeutic, psychosocial and placebo responses.
>
> From a broader perspective, the neuropeptide system may also be the psychobiological basis of the folk, shamanistic and spiritual forms of healing that share many of the characteristics of hypnotic healing currently returning to vogue under the banner of wholistic medicine.

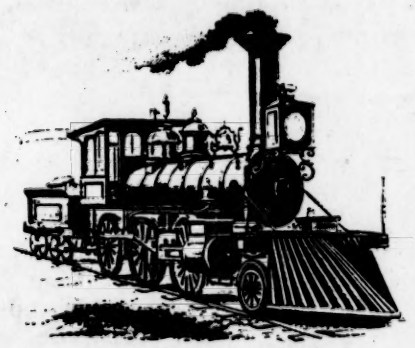
We at the Institute of Noetic Sciences feel there is much to be learned from people in remission and people who have been healed in a spiritual way. They are, I think, our resource for the future. ■

UNCLASSIFIEDS



The UNCLASSIFIEDS are a reader-to-reader service available to *WER* subscribers only. They're designed to provide a cheap communications network for *WER* readers and mild financial assistance to the magazine.

UNCLASSIFIEDS are a great way to reach, survey, educate, link up with fellow *Whole Earth Review* readers. Send us your words, ideas, product descriptions, thoughts, messages . . .



TO ADVERTISE:

- **You must be a current subscriber.** Please send a current mailing label (or copy) from the cover of *WER* when you send in your ad copy. You may become a subscriber when you place your ad. *WER* subscription rates are $20/year ($24/year foreign and Canada). Please add this amount to your payment if you are not currently a subscriber. Order forms for subscriptions are at the back of the magazine.
- **Rates are 75 cents a word.** You count them and send us payment with copy. We will not bill. Payment must accompany the ad and be in U.S. funds drawn on a U.S. bank.
- **The first few words in your ad will be in capital letters.** We cannot do any other words in capitals.
- **To run a repeat ad:** Multiply your ad payment times the number of issues in which you want the ad to run. Send in that amount and we will print the same ad that many times. If you decide to repeat your ad after it has run, or if you wish to make a change in the copy, you must submit the ad again.
- **Deadline** is January 5 for the Spring '90 issue, March 27 for the Summer '90 issue, June 27 for the Fall '90 issue and September 28 for the Winter '90 issue. Sorry, we will not take ads over the phone. Ads received after deadline will be held for the following issue.
- **We print ads in the order received.** "UNCLASSIFIEDS" means "no categories."
- **Mail ad and payment** (made out to *Whole Earth Review*) to: Susan Rosberg, WER UNCLASSIFIEDS, 27 Gate Five Road, Sausalito, CA 94965.

PLANT LORE — Books on traditional, medicinal, spiritual uses of plants. Herbal gifts. Catalogue $1. Cat Creek Herbs, P. O. Box 227-W, Florence, CO 81226

EXOTIC BRAZILIAN SOAP — can soap be delicious? — this is what you'd use on a steamy night in Rio — or elsewhere. Once you've tried it you're hooked. $1.50 each. $10 for 12. Postage: add $1.50 for each group of five. Tropical products, Box 1656, Troy, NY 12181.

ACCORDIONS, CONCERTINAS: Wheatstones, Lachenals, button boxes, new, used, trade, repair, credit cards, catalogues, Castiglione Box 40WE, Warren, MI 48090-0040, 1-313-755-6050.

DIDJERIDU — American crafted didjeridu. Play this powerful aboriginal wind-instrument yourself. Instructional cassettes included. $85. Fred Tientjen 26 Allen St., San Francisco, CA., 94109 415-474-6979.

IN RECOVERY. A Catalog from Columbine Creek. Books, tapes, and tools for anyone wanting to heal emotional pain and live a more fulfilling life. Titles from many publishers cover 12 Step Programs, therapy, self-therapy, bodywork, sex, communication, right livelihood, earth stewardship, children, and living free of addictions, compulsions and codependency. Send $1 to P. O. Box 973, Larkspur, CA 94939

RHYTHM OF OUR HEARTS: 7 original songs by 4-piece, all women rock band. Professionally recorded cassette. Send $10 to: Sweet Release, P. O. Box 188-766, Sacto, CA 95818.

HOW TO PREPARE for the coming depression: A Workbook for Managing Your Money and Your Life During Economic Hard Times. By Mark Friedman. Send $11.95 + $2 postage to NUCLEUS Publications, Rt. 2 Box 49W, Willow Springs, MO 65793. (417) 469-4130. Free Catalog.

EARN YOUR LIVING HELPING THE PLANET. $5000-$100,000 per year part time. Breed endangered species at home. Mammals, birds, reptiles, amphibians, insects, plants. Free information. Zoovival, Drawer 15007-A29, Clearwater, FL 34629 (813) 726-3385

WATERFALLS, FOREST, farmland along State Scenic Wild River. Highland Rim, Cumberland Plateau. Environmental community. Secluded, quiet, yet accessible to university town. Hector Black, Route 14, Cookeville TN 38501. Phone (615) 268-9889.

RISE UP SINGING Songbook. Over 1000 folk and popular songs, many favorites. $14.95 + $1.50 Sunscope Resources Box 3242 Santa Cruz CA 95062-3242

MULTI-PURE DRINKING WATER system delivers chlorine and chemical free water at your tap. Money back guarantee. Write or call Howard Coffman & Associates, P. O. Box 6111, Dept. WER, Manchester NH 03108, 603-626-0380 (recorded message). Distributors wanted. Thank you.

YOUR BIBLE QUESTIONS ANSWERED personally by ordained christian minister. Send your sincere inquiries to: Metrovalley Ministry, P. O. Box 9306, Portland, OR 97207

COMPUTER RADIATION PROTECTION, Reverse Osmosis water purification, magnetic fuel efficiency improvement, and more! S.A.S.E. New Energy Products, 660 Earthway Pullman, W.V. 26241.

ACHIEVE MAXIMUM POTENTIAL and career fulfillment. Nationally commended program for career choice/change combines holistic viewpoint and guidance with practical, in-depth aptitude testing for extraordinary results. Also considering requests for training in this field from gifted, committed, educated individuals seeking right livelihood. ROCKPORT INSTITUTE, Suite 220-S, 90 W. Montgomery, Rockville, MD 20850

SOCIALLY RESPONSIVE INVESTMENT Advisors, services individual or organizational clients as investment manager, and/or broker for socially screened investment stategies and portfolio management. Contact David Brown, SRI Advisors, 800-825-7746, 24hr message.

COMPUTER SUFFERERS! Ott Full Spectrum Radiation Shielded Light Systems, invented by world-famous photobiologist, Dr. John Ott, helps to relieve eyestrain, headaches, irritability and fatigue by counteracting electromagnetic radiations emitted by VDT screens. Call: 1-800-234-3724 or 805-564-3467

HEALTHY FULL SPECTRUM light by Dr. John Ott. Call 1-800-234-3724 or 805-564-3467

"META-MIND METEORITE" elixir — if you've ever doubted the effectiveness of elixirs, this will make you a believer. No alcohol. Expanded awareness; will benefit you on whatever path you are on. Discover and experience this alchemistic wonder. Guaranteed. $9.95. ESD, 7860 W. 18 Lane, Hialeah, FL 33014.

SHAMPOOS: A brand name guide to ingredients you might want to avoid. Order PC Hypertext, min. 256K, single 5¼" drive $11.00, or BOOKLET $6.00. MC/Visa accepted. Access, RR 2 Box 37 Toledo, IA 52342.

HAVE DYING SON. 11 years old, muscular dystrophy. Are you fortunate? Please help grant his wish for home in country. Send money/support to Nicky, c/o his father, Scott Pahlow, Box 3808, Mansfield, OH 44907.

PC-TRICKS©! Amuse, confuse, and confound your friends! All the neat special effects and humorous DOS pranks you wanted to know but were afraid to ask! 80 programs for $29.95. IBM compatible computers. Specify 3.5" or 5.25" disk. Pineapple Software, Dept. E2, P. O. Box 61877, Honolulu, Hawaii 96839.

GROUP MARRIAGE — new book tells how to succeed! Send $7.95 plus $1.50 postage. Quarterly newsletter $9/year. PEP, Box 5247-WE, Eugene, OR 97405.

ADAM SEEKING YOUNG EVE. White, 37, 6'1", 180 lbs, short beard, vegetarian, educated open-minded critical thinker without religious and political dogmas, fit physically and financially, stable, dependable. Graduated from one long relationship, ready for another. Shuns smoking, alcohol, drugs, obesity, otherwise open to pleasant surprises. Seeking passionate young woman, possibly of another culture, race, maybe planet, with attractive body, alert mind, enterprising spirit, and desire to have children. Box 12056-R, La Jolla, CA 92037.

MODERNE MAN COMICS: b. von alten; modern life, environmental implications; paperback, 334 strips; some seen Earth First!, Utne Reader; ISBN 0-9624218-0-4; $9.95 plus 15% shipping; (20% outside U.S.; U.S. funds) O.K. Press; P.O.B. 521; Butte, MT 59703; $1.00 off with this ad.

WORLDWIDE ENGLISH NEWSPAPERS and Magazine-of Month Club. 65 countries! Sampler 3/$2.49. Free brochure. Multinewspapers, Box DE-WW, Dana Point, California 92629.

YOU DON'T NEED A COMPUTER to enjoy this active by-mail network for group brainstorming, on topics from economics to mind & consciousness, from community action to international linkage. SASE to Action Linkage, 5825 Telegraph Avenue #45, Oakland, CA 94609.

NEW MAGAZINE EXPOSES CONSENSUS reality. Subjects include "Mysticism and Psychotherapy," "Sexuality," "End of the World," "Eros and Ecstacy," and Conspiracies. Send $2 for a sample issue to: Critique, POB 11368-WR, Santa Rosa, CA 95406 or request free catalog.

AMERICAN SPIRIT natural tobacco and cigarettes. 100% free of chemical additives. If you have wanted to stop smoking but could not, or if you smoke out of choice rather than habit . . . here is an alternative you should at least try. Send $2.00 and request the "sampler package" (one pack each, filter and non-filter cigarettes; one pouch of loose tobacco). POB 1840, Santa Fe NM 87504.

SAVE MONEY ON SOLAR! Large selection of products for solar electric, hot water, hydropower. Complete systems. 80-page catalog, $4.00. Call/write for free brochure! Integral Energy Systems, 105-W Argall Way, Nevada City, CA 95959. (916) 265-8441.

"I STARTED READING *The Long Watch* yesterday afternoon and there went the day! And the evening!" — Timothy Leary. Call or write for free brochure. Spiraling Books, 12431 Camilla St., Whittier, CA 90601, (213) 692-2198.

IRELAND TRAVEL SEMINAR — A unique, leisurely, travel seminar: "Celtic Traditions, Heritage, and Spirituality". July 14-29, 1990, Galway, Ireland. Experience the wholeness and holiness of Celtic tradition where it lives still. Day trips to sacred sites, lectures, workshops, and ample free time to discover yourself and Ireland. Come with us to Ireland this summer and discover the enchantment of a spirituality of relatedness and the lessons it can teach about how to re-invent the world. Contact: Dr. Carey, Box 7209W, Prospect, CT 06712 (203) 758-5509

HATE YOUR JOB? Discover new work options, alternative careers, home business opportunities. Trial subscription, $1. The Whole Work Catalog, Box 297WER, Boulder, CO 80306

UNDERGROUND ZINES, orgone, translations, mail art, autofiction, conspiracy, film, situationist, directories, glasnost, spec-tech, imported (UK, Australia) periodicals, books, pamphlets. Catalog $1: Flatlanders, Box 2420, Fort Bragg, CA 95437-2420.

GNOSIS MAGAZINE #14 (The Journal of Western Inner Traditions' Winter '89/'90 issue) due out in Jan. Theme: The Dark Side. Issues #1-13 available. Edited by Jay Kinney. Back issues: $5 each. Subscriptions: $15/4 issues ($20 for Canadian & foreign subs). Checks drawn on U.S. banks or Int. M.O.s to: Dept. W, The Lumen Foundation, P. O. Box 14217, San Francisco, CA 94114.

SOLAR ENERGY BOOKS & PROJECTS — Surprisingly large selection from specialty bookstore. For a copy of "Solar Energy in Architecture" catalog, send $1 to EARS, Box 514, LaVeta, CO 81055

QUILTS FROM THE OZARKS REGION. Handquilted. Handcrafted. Very exquisite. Longtime WER reader seeks buyers wholesale and retail. Scarborough-2. Rt 1. Box 107A, West Fork, AR 72774.

DR. HAUSCHKA COSMETICS support the skin as a living organism. Ingredients are either grown bio-dynamically or are gathered from wild areas. Available from Harmonic Transformations, P. O. Box 18141, Seattle, WA 98118

INSTANT DOMES: 20 minutes up! Proven performance. Many models. Catalog $1. Shelter Systems, P. O. Box 67-W, Aptos, CA 95001

ECLECTIC BOOK PUBLISHER seeks non-fiction manuscripts. Send ms. or queries on travel/hobbies/outdoors etc. David Tripp, Culpepper Press Inc., 6921 Gordon Road, Siren, WI 54872.

WE DO HOME BREW. We'll help you to. Any kind, any place. If you can boil an egg, you can make your own beer. Free Catalog, and a toll-free order line. Great Fermentations, 87W Larkspur, San Rafael, CA 94901. 1-800-542-2520.

INSIGHT/GUIDANCE. Respected psychic, eighteen years experience. Send SASE for details. Kathy Lynn Douglass, HC89E Box 451, Willow, Alaska 99688-9705.

RUDOLF STEINER'S BOOKS on biodynamic agriculture, nutrition, Waldorf education, anthroposophical medicine, inner work, reincarnation. Free Catalog. Anthroposophic Press, Suite 2, Star Route, Hudson, NY 12534 (518 851-2054)

THE ESSENTIAL AUROBINDO is back in print, an anthology with introductions and new Afterword by Robert McDermott. Epilogue focuses on education and international community of Auroville. Send $14.95 to SAA, P. O. Box 372, High Falls, NY 12440.

FLY AGARIC MUSHROOMS. Amanita Muscaria. Wasson said it was Soma. Allegro said it was Jesus. 30 dried grams red var. muscaria grade A: $60.00. Grade B: $50.00. Red/orange var. flavivolvata grade B: $40.00. Other variations and grades available. J.L.F. P. O. Box 184-W, Elizabethtown, IN 47232 (812-379-2508).

MOBILES FOR THE OUT-OF-DOORS. Brass, stone, and fishing swivels; write me for a flyer. $90 and up (mention WER); tiny to tremendous. Hank Roberts (Mobiles), P. O. Box 231, Berkeley, CA 94701; 415/843-8639.

THE TRUTH That Will Make You Free. Ultimate spiritual knowledge. Free booklet! Peter Crames, Box 1023-WER, Cambridge, MA 02238.

LIVING FREE newsletter. Forum for debate among freedom-seekers, homesteaders, survivalists, libertarians, anarchists, outlaws. Lively, unique. $8.00 for 6 issues, sample $1.00. Box 29-WER, Hiler Branch, Buffalo, NY 14223.

DOME MAGAZINE. A quarterly magazine for dome lovers. $32 for 4 issues ($36 foreign, US funds only), current issue $9. Dome, 4401 Zephyr Street, Wheat Ridge, Colorado 80033-3299. 303-420-2222 for Visa/MC orders.

ADVERTISING WORKS when you reach the audience that needs your products or services. We specialize in placing ads for healthy, enlightening products in several progressive national magazines. They run the gamut from *Yoga Journal* to *Mother Jones* emphasizing environmental issues, spiritual practices, and holistic health education. Our services are free, but alas, not the ads. GPR, 2054 University Ave. Ste. 302-R, Berkeley, CA 94704. (415) 548-1680.

SUPERLEARNING! TRIPLE LEARNING SPEED through music! Maximize memory; potentials. Stressless! Free — book excerpt; personal development catalog . . . stress-reducing Superlearning Music; relaxation training; accelerated languages; more . . . Superlearning, 1290 West 11th, #105-WER, Vancouver, Canada V6H 1K5.

THE WELL (Whole Earth 'Lectronic Link): If you have a computer and modem you can be part of a unique community of people that meets online. The Well is divided into conferences that discuss just about anything you can think of. Mind, work, sexuality, Grateful Dead, and parenting are just a few. The rates are $8/month plus $3/hour for online time. Call 415/332-6106 for online sign-up, or 415/332-4335 to talk with a human being.

HOW TO END THE DROUGHT. Send SASE to ALF, 648 West Club Blvd., Durham NC 27701.

PROPAGANDA REVIEW, the quarterly journal of propaganda and disinformation, $20/4 issues. (415) 332-8369

ENJOY LIFE WITHOUT STRESS. "Instant Organizing Secret". $4 DEVESH INC., 8910 Gross Point, Skokie, IL 60077.

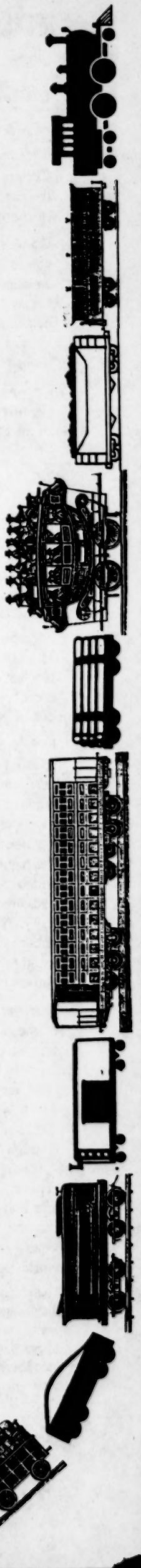
QUETZALCOATL: The Art, Mythology and Religion of the Plumed Serpent. Fourteen-day tour/workshops in Mexico — January, February and March 1990. We will challenge the pat answers of the materialist "experts" and present the neglected views of visionary thinkers, Laurette Sejourne, Frank Walters, Peter Tompkins and Hugh Harleston. A unique highlight will be a special evening spent with Harleston before our two days in Teotihuacan. Write for detailed itinerary and further information: Caracol Tours, P. O. Box 17, Erwinna, PA 18920. (215) 847-5719.

WITHOUT LOVE IN A DREAM it'll never come true.

EARTHSEALS, stickers of the whole Earth from famous NASA photo. Four color, two inch, not waterproof, printed with environmentally safe ink. By donation. Free Samples. 4Gaia, P. O. Box 8000, Berkeley, CA 94707

PSYCHEDELIC THINKING is offered on tapes, books, video and software by Lux Natura. We have all of Terence McKenna's material: Recordings of his extraordinary talks. An entire workshop on shamanic ethnobotany. *True Hallucinations,* McKenna's 9-hour Amazonian mind odyssey produced on cassette as radio drama. Recordings of Peruvian shamans singing magical songs in ayahuasca sessions. The classic how-to manual *Psilocybin: Magic Mushroom Grower's Guide.* And now, follow the fractal nature of history — past or future — with *Timewave Zero,* stunning software for the Apple // or MS-DOS (Mac coming). Catalog free from Lux Natura, 2140 Shattuck Ave., Box 2196-WER, Berkeley, CA 94704.

STUDENT INTERNSHIP: New Alchemy Institute, a nonprofit ecology and education center, offers college-level internship: Sustainable agriculture, community systems, ecological technologies. Third year college students or equivalent; integrates academics with hands-on experience in ongoing research, education and demonstration projects. Includes workshops open to the public in ecological landscape design and more. Opportunity to explore today's central environmental issues. January 22-August 17, 1990. Internship or workshop inquiries: New Alchemy Institute, 237 Hatchville Road, East Falmouth, MA 02536 (508) 564-6301.



BACKSCATTER

Echoes from readers back to *Whole Earth Review* (27 Gate Five Road, Sausalito, California 94965)
We pay $15 for every letter we publish.

Miniature wet suits

RE: "A Girl's Guide to Condoms," *WER* #62, p. 137):

Condom manufacturing should be exploiting the metaphorical and mnemonic potential of the condom experience.

Considering the wet, briny environment involved in this "innersea diving," I would welcome condoms decorated as realistic "scale models" of various fish, whales, dolphins, squid, sea cucumbers, etc. (The makers need to keep them at least as thin, though. Weird, eh?

I'm way too bashful to sign my name to this. However, I did tip off some manufacturers about this issue.

Love & Life,
Mr. R
Sacramento, CA

In praise of non-teachers

The most remarkable thing about Kjell-Jon Rye's technology program ["Robo-Prof," *WER* #62, pp. 2-6) would seem to be his commitment. Comparable results have been obtained with such subjects as Latin. The common element is a rather special teacher. That is why such programs are bad prototypes. Scale up, and you rapidly run out of people like that.

Here is a better alternative. The prep school I went to did not require teaching certificates, and many of the teachers were graduate students or the equivalent, who used the school as an alternative to a teaching assistantship. Of course they were of the highest caliber. Without being very dedicated to teaching (what they were dedicated to was their subjects), they were easily able to thrill students, simply by talking about whatever they happened to be interested in. The best teacher is the prospective author trying out ideas for his book.

Our and their interests coincided. Very few of these people would have wasted their time studying education. So they could not teach in the public schools. There is something very badly wrong with a school system which systematically rejects the best and the brightest, because they will not jump through hoops designed for the second-rate. A sensible system of education would accept any advanced or professional* degree as a license to teach secondary school, so that the holder could make a living while writing his book or completing his masterwork. Everyone would benefit.

* Undergraduate professional degree programs, such as engineering, architecture, fine arts, etc., are more nearly comparable to the first years of graduate school than to a sound undergraduate liberal arts program, let alone the Education major.

Andrew M. Todd
Springfield, OR

Rail Boats

We have alternatives to cars, commercial boats, and planes (biking, sailing, ultralights). Still, there is something missing; what about the romance of the rails? You can hop a freight, but (from what I read) it's dangerous, and (from what I hear) uncomfortable. With thousands of miles of railroad track just laying around, what about a device for personal rail travel? A light, transportable Rail Boat for use by the general population. Rail lines traverse the entire country and many of them are abandoned or seldom used. A Rail Boat seems like an idea ripe for realization. Even those living in major cities could drive out to the suburbs, unload their Rail Boats and go for a day sail — or take off for a month-long trip to the wilderness of Idaho.

Here are a couple of ideas to get the backyard inventors started. For safety reasons, the Rail Boat should seat two people so you can look up and down the track at the same time. Also, for safety, you should be able to get the Rail Boat off the track in a hurry. It must be light enough for two people to carry, collapsible, and able to fit on a car top. There should be some arrangement for carrying gear for long trips, perhaps a nylon web "platform."

Once the basic design is worked out, you could tinker with different ways to propel the Rail Boat — the two-man pump handle arrangement of the old fashioned rail cars, rowing mechanisms with sliding seats, bicycle pedals, and when crossing flatlands, a sail would come in handy. I can also see small-circulation magazines, "Abandoned and Seldom Used Rail Lines of Georgia." It all sounds so delicious; I hope someone gets busy.

Andrew Dick
Minneapolis, MN

Don Ryan

The *I, Claudius*/magic mushroom connection

Regarding the Archaic Revival, the Goddess, mushrooms and 19th century anthropologists, "notably Fraser" ("Plan, Plant, Planet," (*WER* #64, p. 5, and also the interview with Marija Gimbutas in *WER* #62, p. 120), I couldn't help but think of Robert Graves. In this century no poet has been, perhaps, as profoundly influenced by Fraser's *Golden Bough* as Graves was, and relatively few have shared his devotion to the Great Goddess, or his determination to revive the matriarchal tradition submerged by patriarchal western culture. Poet, historian, archaic revivalist, the author of *The White Goddess* among many other provocations, counted among his friends none other than R. Gordon Wasson, whose original correspondence (actually initiated by pediatrician Valentina Wasson) with Graves in 1949 regarded the murder of the Roman emperor Claudius, central figure of Graves's historical novels *I, Claudius* and *Claudius the God*. After working with Graves, Wasson eventually wrote an account of the death of Claudius in which he attributed the emperor's demise to poisoning by a derivative of colocynth, wild gourd, rather than to poisoned or poisonous mushrooms.

Mushrooms evidently remained central to the Graves/Wasson relationship. In his review of the Wassons' *Mushrooms, Russia, and History* for the *Atlantic* in 1957, Graves wrote that about four years earlier he "happened to send [the Wassons] a reference to a pre-Columbian mushroom cult in Mexico, reported by Spanish missionaries at the close of the 16th century" which prompted them to take a short vacation in Oaxaca. According to Martin Seymour-Smith, "Graves's original part" in Wasson's discovery of Maria Sabina has gone largely unnoticed. "My mushroom man [Wasson] is very elated since he actually found the mushroom oracle I sent him after in Mexico," Graves wrote his future biographer in December of 1956.

Although they had corresponded for several years, Graves met Wasson first in Mallorca in 1955. In 1960, in Wasson's New York apartment, Graves visited the "poet's paradise" via ingestion of crystalline psilocybin, accompanied by the recorded chants of "Wasson's *curandera*" (evidently Maria Sabina, though she goes unnamed in Graves's account). At about the time of his psilocybin experience with Wasson, Graves published a number of works that reveal his long standing interest in what McKenna calls the "transfer of information from one species to another," though Graves would not have called it this. In "The Poet's Paradise," "Food for the Centaurs," *The Greek Myths, Hebrew Myths*, and others, Graves, in typical "analeptic" fashion, fills in torical gaps with facts drawn from analogies from Meso-American ritual use of psychedelics. He finds, for example, that the Arabic root word *ftr* means "first 'toadstool,' then 'divine rapture,' then 'sacred pellets of bread.' " In article after article, Graves points out that "the name 'toadstool,' particularly when applied to flyagaric, is apt; because it contains a poison,

bufotenine, which is also exuded by toads . . . when they are frightened," that the toad emblem seems to be universally associated with mushrooms and, interestingly, with ancient Mycenae, which, he says, means "mushroom town."

Interest in and use of psychedelics by 20th century writers is, of course, nothing new. In the account of his psilocybin experience, Graves distinguishes between the use of drugs and the use of psilocybin; in his view, " 'to drug' is to stupefy, rather than to quicken, the senses." Interestingly enough, "analeptic," the term Graves long used to describe his historical-critical method, means, in addition to "restorative," "awakening from a stupor." Ultimately, Graves came to mistrust the mushroom induced trance, viewing it as passive and "unearned," and preferred what he called "the natural poetic trance" in a "small white-washed cell (furnished with only a table, chair, pen, ink, and paper) to which a poet may retire and actively write poems in her honour — rather than bask sensuously under her spell." It was Wasson, of course, who explored the connection between hallucinogenic mushrooms and "the genesis of religion." Readers of McKenna and Rheingold, and of Wasson's *Soma: Divine Mushroom of Immortality* might look to Graves, and beyond him to Fraser, to find interesting similarities of method that represent one way 19th and 20th century amateurs have sought to recapture archaic traditions.

Mark Nicoll-Johnson
Modesto, CA

The wisdom of the people

I plead for a Conservative voice in *WER*.

There is good and bad in your publication.

Good is "how to" on organic agriculture, housing, and repairing the environment.

Bad is the exclusionary jargonistic diatribes of feminists on goddess garbage, womenspeak and such non-sense.

How puzzling that a journal that purports to be about real people is so at odds with the people who actually inhabit this country.

Rural Americans are overwhelmingly Republican and supported Ronald Reagan with huge majorities.

Have you never wondered why?

Why do you write off the beliefs of the common American?

Of course your circulation stays stuck. You would rather advance gender antagonism and failed governmental intervention than accept the wisdom of the people.

What good is there in a dictatorship that is socialist over one that is capitalist?

Change your ways and you will be much happier.

A. T. Smith
Tully, NY

Choosing your parents

For those attempting to answer the troubling question "When does life begin?" in their struggle to come to a decision about the morality of abortion, a 1979 study by psychologist Helen Wambach entitled *Life Before Life* makes for interesting reading. The author hypnotized 750 subjects who, to her surprise, were able not only to remember their own births, but "past lives" and a "between-life" state as well. Most were able to pinpoint the time their "souls" entered the fetus. The results: "89 percent of my subjects expressed the feeling that their consciousness was something separate from that of the fetus, and they did not experience inside the fetus to any degree until at least the sixth month. A majority of the subjects did not experience the fetus until just before birth. Of those who reported joining the fetus from conception to four months, their descriptions indicated that they might also have been experiencing in and out of the fetus."

The author asks what light her study might shed on the question of abortion and concludes: "One impression that emerges from these 750 cases is that birth — and indeed living another lifetime — is perceived as a duty and not a pleasure. The soul apparently has a choice as to which fetus to enter. If one fetus is aborted, apparently it is possible to choose another. In some cases, the soul who will occupy the fetus is in contact with the soul of the mother and can influence her decision regarding abortion. My data also indicates that souls can elect to leave the fetus or the infant's body and return to the between life state. Perhaps the sudden death syndrome in infants may be the result of a soul's decision not to go ahead with a life plan."

Bill Brundage
Kurtistown, MI

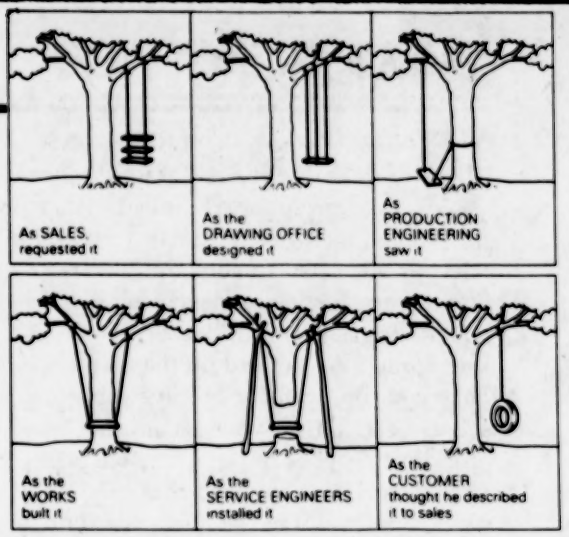
The Joker

I was surprised Berman's article "The Gesture of Balance" (*WER* #63, p. 24) mentions Krishnamurti and others, but does not mention the one person alive today who overcomes the mind/body split, has a great sense of humor, and has developed, over the past thirty five years, dozens of methods designed to achieve the breakthrough to a state of "no-mind", a state of direct experience of life without the need of ideology, religion, or philosophy.

I refer to Osho Rajneesh who was known before February 1989 as Bhagwan Shree Rajneesh. Osho is the world's most prolific author, with over 650 titles published (actually 1,150 titles counting translations into 32 languages!)

Many people probably never understood Osho's joke on American materialism (the collection of 93 Rolls Royces at Rajneeshpuram, Oregon) and therefore have never appreciated what Osho is really doing. The Neo-Sannyas movement Osho started in 1970, symbolized by "Zorba the Buddha" — the end of the opposition between materialism and spiritualism — is stronger than ever today. Osho is helping millions in their individual journeys of conscious evolution, toward that state of living ordinary life extraordinarily; toward the realization: "THIS VERY BODY THE BUDDHA, THIS VERY PLACE THE LOTUS PARADISE." And we're having fun doing it!

Swami Samarpan David
Medellin, Colombia



Corrections

The following corrections can be made for WER #64.

The American Citizen (p. 131), mentioned in "Homeschooling Resources," can be contacted at the following address and phone: Federalsburg, MD 31632-0220; 800/333-6583.

Saxon Publishers (p. 128), mentioned in "Homeschooling Resources," is now located at 1300 McGee/Suite 100, Norman, OK 73072; 405/329-7071.

The following markets mentioned in "More Mail Order Organic Foods" have new addresses and phone numbers: Eagle Agricultural Products, 407 Church Avenue, Huntsville, AR 72740; 501/738-2203. The Herb and Spice Collection, 800/365-4372. (Note: Hawthorne Valley Farm has discontinued their mail order department.)

World Wide Aquatics (p. 94) also has a new address: 4814 Business Center Way, Cincinatti, OH 45246.

Mountainsmith Sleds (p. 90) has a new toll-free number: 800/426-4075.

People's Yellow Pages (p. 51) has a new address and phone: 528 Chestnut Street, Santa Cruz, CA 95060; 408/458-9425.

Tree Crops (p. 37) is now available (with a new introduction by Wendell Berry) from Island Press, P. O. Box 7, Covelo, CA 95428.

Neoprene Shoe Covers (p. 94) can now be reached through calling 800/PBS-BIKE.

University Products, Inc. (p. 92) has a new address: 517 Main Street/P. O. Box 101, Holyoke, MA 01041-0101. Toll-free number for MA residents: 800/336-4847.

THANK YOU

UNLIKE MOST PUBLICATIONS, *Whole Earth Review* is wholly reader-supported. Subscribers tell us that getting a general-interest magazine without ads is worth something extra. And for us, having readers instead of advertisers as financial backers is why we keep going. We depend on the extraordinary encouragement of our supporting subscribers. Thank you. As another way of indicating your importance, we print your illustrious name and that of your scenic hometown in the magazine (unless you prefer to remain anonymous). Most of your contribution is tax-deductible (check with your tax expert), since we are a nonprofit foundation. Would you consider joining the folks that make this magazine unique? You can join in several ways, at several levels of support:

• **PERPETUAL:** $10,000/life. Perpetuals get a set of back issues (as complete as we have), two copies of every Point Foundation book or product, and get their *WER* in an envelope, air mail, for earthly forever (a Perpetual subscription can be willed to descendants, or passed on to others), as long as we are around.

• **ANGEL:** $5,000/life. Angels get two copies of every Point book or product, and get their *WER* in an envelope, air mail, for the rest of their life or ours, whichever comes first.

• **MANIACAL:** $1,000/life. Maniacs get their *WER* in an envelope, air mail, as long as they (or we) live.

• **MUNIFICENT:** $250/year. Munificents get their *WER* in an envelope, air mail, for a year, and two copies of whatever books we publish that year.

• **SUSTAINING:** $100/year. Sustainers get their *WER* in an envelope, air mail, for a year.

• **RETAINING.** $50/year. Retainers get their *WER* in an envelope, air mail, for a year.

Won't you consider joining our Supporting Subscribers program?

Maniacal Subscribers

Peter C. Akwai
Dreieich-Gotzenhain, West Germany
Denise & Norman Alm
Inchture, Perthshire Scotland
Bamboo Flying Water
New York, New York
Basic Living Products, Inc.
Berkeley, California
Leona & Bruce Baumgart
Los Gatos, California
Donna Boyd & Gene Combs
Lexington, Kentucky
Marlon Brando
Beverly Hills, California
Stephen & Julie Briggs
Moretown, Vermont
Peter Buckley
Dusseldorf, West Germany
Continuous Wave
Joe S. Coulombe
South Pasadena, California
Lynn Dondero
San Leandro, California
Robert Dunn
Delmar, NY
Alex Funk
Durham, North Carolina
E. D. Grover
Rolling Hills Estates, California
Eric Haines
Ithaca, New York
Hampshire College Frog
Amherst, Massachusetts
Allen Hogle
Gualala, California
Michael O. Johnson
Herndon, Virginia
Kinswoman
Eugene, Oregon
James E. Lovelock
Launceston, Cornwall England
Douglas Martin
Sausalito, California
Russ Molari
Los Altos, California
Mike Nathan
Rochester, New York
W. K. Nelson
Kalispell, Montana
Anne Norcia
Waynesville, Ohio
Nothing Matters
Everything Is Important
Norman Pease
Orinda, California
Plant Just One Tree
Love, Ma
Jim Sanders
Paia, Hawaii
Jim Sells
Corrales, New Mexico
Norman & Joanna Sher
Brooklyn, New York
Katherine W. Tremaine
Santa Barbara, California
Bob Wallace
Seattle, Washington
David Williams
Leeds, England
Greg & Pat Williams
Gravel Switch, Kentucky
Ye Olde Toothe Fairye
Birmingham, Alabama
and 11 anonymae

Munificent Subscribers

Jules Alciatore
Metairie, Louisiana
J. L. Kirk
McLean, Virginia
Ted & Trudy Winsberg
Boynton Beach, Florida

Sustaining Subscribers

Grant Abert
Readstown, Wisconsin
Tremaine Arkley
Independence, Oregon
Frank Bernstein
Had Ha Sharon, Israel
Charles Bouril
Yountville, California
Mrs. Julia M. Brand
Rockford, Illinois
Fairleigh Brooks
Louisville, Kentucky
Max Buehlmann
Bremgarten, Switzerland
Bob & Phyllis Clark
Vashon, Washington
Stephen F. Coady
Dallas, Texas
Mark Cohen
Winchester, Massachusetts
Jerry Crutcher
Rockville, Maryland
Richard Daly
Madison, Wisconsin
Michael J. Davey
Sunnyvale, California
Gail Dawson
Columbia, Maryland
John Delantoni
San Francisco, California
Fred Dick
La Farge, Wisconsin
Daniel Drake
Mill Valley, California
Roger Easton
Henrietta, New York
Raymond A. Elseth
Palatine, Illinois
Will & Janie Endres
Prospect Hill, North Carolina
Walter & Kitty Enloe
Hiroshima, Japan
Dwight A. Ernest
Milton Keynes, England
Zvi Flanders
South Lyon, Michigan
Anthony Flesch
Santa Monica, California
Robert Fuller
Guilford, Connecticut
K. Hoover
San Francisco, California
In memory of Frank Simons
Brookline, Massachusetts
Mark Kiemele
Ponteland, Newcastle-on-Tyne, England
Bill Kilpatrick
Beverly Hills, California
J.L. Kirk
McLean, Virginia
Michael Lamont
Eugene, Oregon
Jack Landman
Fort Worth, Texas
Robert H. Larson
San Diego, California
Peter Lit
Elk, California
William MacKaye
Washington, DC
Alexandra Martin
Santa Fe, New Mexico
Donald C. Meyers
Front Royal, Virginia
Val Morgan
Renton, Washington
Fred Nitney
Renton, Washington
Thomas Northwood
Brookline, Massachusetts
Lyle Poncher
Los Angeles, California
Glen Price
Mill Valley, California
Roy Rappaport,
Ann Arbor, Michigan
William Ryder
Miami, Florida
Steve Schmid
Thermal, California
Paul Schwartz
Amsterdam, The Netherlands
Jane Sibley
Boston, Massachusetts
Layne & John St. Julien
Baton Rouge, Louisiana
C. Allen Waddle
Los Angeles, California
Gary Waldron
Laguna Beach, California
James F. Wanner
Charlotte, Vermont
John F. Warren
Pittsburgh, Pennsylvania
Joe Weisman
San Francisco, California
Chris Whatley
Austin, Texas
Timothy W. Wheeler
Hong Kong
Gwendolyn Wilkins
Fort Lauderdale, Florida
Phil Wood
Berkeley, California
John Wright
Escondido, California
Pamela Zave
Chatham, New Jersey
Arnold M. Zwicky
Columbus, Ohio

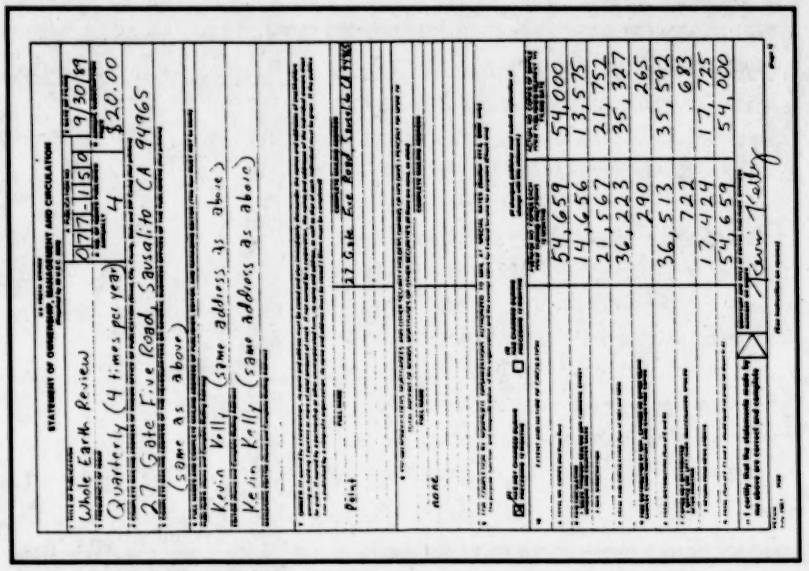
and 1 anonymoose

Retaining Subscribers

John Abrams
Chilmark, Massachusetts
David B. Appel
Seattle, Washington
Rodney Baxter
Uniontown, Washington
Janet & Milton Bennett
Portland, Oregon
Mark Bishop
Austin, Texas
Michael Boddy
Binalong, New South Wales, Australia
Nancy Booth
Los Angeles, California
Raymond & Margaret Castrey
Springfield, Missouri
Norman Clearfield
Oak Park, Illinois
Connie L. Cullen
Huntington Beach, California
Norman E. Davis
Gold Beach, Oregon
David Dunning
San Francisco, California
Peter Fischman
Concord, Massachusetts
Robert & Jane Fleck
Hermosa Beach, California
Albo Fossa
Santa Fe, New Mexico
Mike Glancy
Wilmington, North Carolina
Morton Goldberg
Ann Arbor, Michigan
Mark Richard Goldstein
Clinton, Maryland
Robert Gross
Houston, Texas
R. Gurule
Boston, Massachusetts
Dennis B. Hansen
San Francisco, California
G. Brian Hellyer
Markham, Ontario Canada
Doug Immel
Woonsocket, Rhode Island
Ray Kleiman
Hanalei, Hawaii
Hiatus Limbo
Parsipanny, New Jersey
Brian Maxson
Riverside, California
B. Muller
London, England
Lewis Orr
Topsail Beach, North Carolina
The Parkers
Ridgecrest, California

George Patay
Des Plaines, Illinois
Steve Polo
Charleston,
South Carolina
Sasha S. Rodman
Tucker, Georgia
Alex Rogers
Mountain View,
California
Melissa Ropke
Los Angeles, California
Robert Rosoff
New York, New York
Howard Scherzer
New York, New York
Sandor Soichet
San Francisco, California
Judith A. Smith
Kenilworthy, New Jersey
Jeff Travis
Greenbelt, Maryland
Ted Wachtel
Pipersville, Pennsylvania
Greg Wenneson
Sonoma, California
Peter van der Ven
Seattle, Washington

and four
earthshakin'
unmentionables



READER SERVICES: HOW TO . . .

. . . Subscribe to *WER*

Subscriptions to ***Whole Earth Review*** are $20/one year (4 issues) and $37/two years (8 issues). Foreign rates are $24/one year and $45/two years. For air mail delivery anywhere in the world, add $8 per year. Send your order with payment to: ***Whole Earth Review***, P. O. Box 38, Sausalito, CA 94966, or call 415/332-1716.

. . . Solve Subscription Problems

If your subscription has a defect, please address all correspondence to us at P. O. Box 38, Sausalito, CA 94966.

. . . Order Back Issues

Most back issues are available from us for $6 each, postage paid. The following issues are rare or out of print: 1, 3-9, 27, 28, 51, 52, 53, 55, 57. Bound, xeroxed copies of these rare issues are available for $30 postpaid; collectors are invited to inquire for prices and availability. Send prepaid orders, or requests for a complete list, to 27 Gate Five Road, Sausalito, CA 94965, or call 415/332-1716.

. . . Adopt A Library

Share the *Whole Earth Review* — give a library a subscription! These people have (since last issue):

Gail and Tremaine Arkley to Pilot Rock High School, Pilot Rock, OR; Dalles-Wasco Library, The Dalles, OR.

These libraries are waiting to be adopted:

Belize Center for Environmental Studies, Belize City, Belize, Central America.

Friend's Peace Center, San Jose, Costa Rica, Central America.

Serra Mesa Library, San Diego, CA.

Cimarron Library, Arizona State Prison, Tucson, AZ.

World College West, Petaluma, CA.

Oregon and Iowa Librarians: Gift subscriptions are available through the generosity of Gail and Tremaine Arkley, and that of Ed Mead.

If you would like to adopt a library, send your contribution to: WER Library Fund, 27 Gate Five Road, Sausalito, CA 94965.

If you are a librarian who would like a gift subscription for your library, send your request to Lori Woolpert at 27 Gate Five Road, Sausalito, CA 94965.

. . . Change Your Address

Moving? Send a note with both your old and new addresses to **Whole Earth Review**, P. O. Box 38, Sausalito, CA 94966. Ideally, we'd like to know six weeks in advance, and have a copy of your old address label.

. . . Rent Our Mailing List

Send a letter to Keith Jordan, ***Whole Earth Review***, 27 Gate Five Road, Sausalito, CA 94965 for rates and information.

Recent renters: American Society for Cybernetics, Amnesty International, Cultural Survival, Garbage Magazine, Habitat for Humanity, Institute for the Study of Human Knowledge, Music for Little People, Raven Maps and Images, Seventh Generation, Tranet, World Watch Institute.

If you want your name left off mailing list rentals, please write and tell us.

. . . Order From Whole Earth Access

The phrase "or Whole Earth Access" that appears under most of our access information means you can order the product from the Whole Earth Access Company, an outfit inspired by the ***Whole Earth Catalog*** but not financially connected with us in any way (see p. 136). *Do not send orders to **Whole Earth Review**.*

Whole Earth Access: 2990 Seventh Street, Berkeley, CA 94710. 415/845-3000; 800/829-6300.

All orders are shipped UPS unless otherwise specified. $3 shipping-and-handling fee for up to five books, 50¢ for each additional book.

Large orders (over 20 books) will be billed at actual UPS rate.

UPS Blue Label is available at $6.50 for up to five books.

Foreign orders (surface mail): $4 for first two books, 50¢ for each additional book.

California delivery: add 6% tax (BART counties add 6½%). **VISA/MasterCard** orders accepted.

For computers and software:
Whole Earth Electronics, 1311-B 67th Street, Emeryville, CA 94608; 800/323-8080.

GOSSIP

WHEN WE LAST LEFT former WER *copy editor Joe Kane, he was setting off for the source of the Amazon, part of a crazy plan to kayak the length of that legendary river. He survived the source-to-mouth expedition and has a book-length story to tell about it. His account,* Running the Amazon, *briefly surged onto the* New York Times *bestseller list. Lessons of the tropical rainforest swirl through a first-rate, fast-paced adventure story. Rave reviews throughout the office. Joe is sniffing around for an idea for his next book, perhaps an environmental adventure in another part of the world.*

"How come Whole Earth can keep going when it always has a loss on its financial statements, quarter after quarter? For as long as I have been reading the magazine, I look at the bottom line each issue and it is always minus." That's Paul Hawken musing at a recent Point board meeting. Good question; many readers ask the same. What keeps it going is that every once in a while after a long, steady stream of negatives, a large plus sneaks in, little noticed, which counterbalances the many smaller negatives. Loyal followers of our financial page should note the sizable plus this quarter, and keep it in mind. More negatives ahead, likely . . .

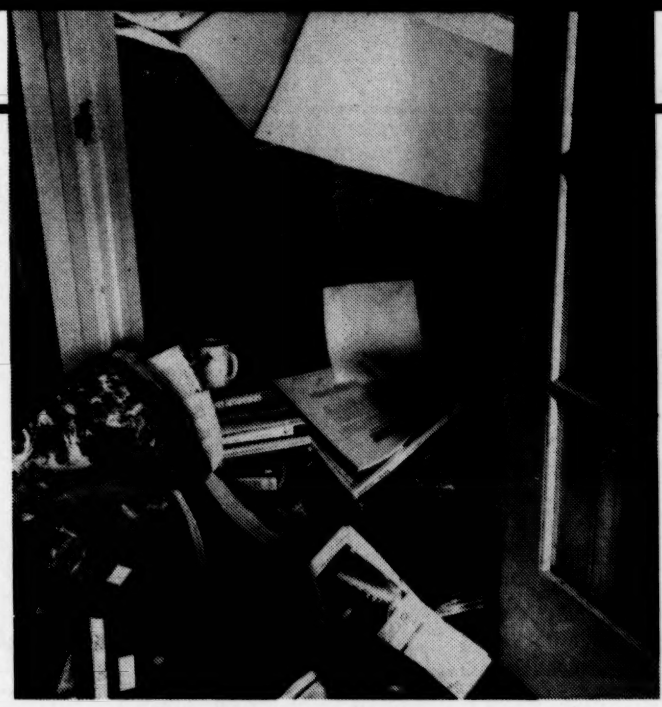
(rumble) . . . (desk shakes) . . . (floor jumping) . . . Earthquake! someone yelled.

That's as far as I got in printing out what was going to be the gossip for this issue. I was already running down the book-lined halls to the front door. I rushed out to see all the powerlines swaying ludicrously on rubber telephone poles, transformers popping like cherry bombs down the line. It was over in 15 seconds. No one hurt. Power and phones down. The production annex building began to smell like gas. No one could find the main gas valve, so we quickly evacuated the artwork, paste-up boards, and typeset text for this issue in case the place blew up. By the time the firemen made it to the office, Richard Nilsen had located the valve to turn the gas off.

Other regions of the city did not fare as well. Patty Phelan rode her bike to the WER *office (car traffic immediately froze), worried about Stewart's absence. We didn't find out where Stewart had been until the next day, when he posted the following on the WELL:*

Topic: Earthquake!! Oct. 17th at 5:04pm #144: Stewart Brand (sbb) Wed, Oct 18, '89 (11:49) 59 lines

As it happened, I was driving through the Marina at 5:03 pm yesterday when I thought my steering had gone out, swaying me uncontrollably from lane to lane. I pulled over, checked the radio (both NBC and CBS were white noise), drove a ways, saw a big cloud of dust in the sky, drove toward it and parked. So about 4 minutes after the quake I was one of the first in at Presidio and Beach where those two apartment buildings fell into the street. Tranquil scene, more like looking at a photograph of what happens with bad building design than a tragedy — that took a while to develop.



The editor's office one minute after the 7.0 earthquake. Destroyed was the small world of Ecosphere No. 58262, the self-contained universe in a glass globe which was sitting on my desk, and which was featured on the cover of *WER* #46. Other offices at Whole Earth suffered no damage because their shelves were bolted to the walls.

Don Ryan

There were shouts coming from deep within one of the collapsed buildings. I and an officer Garrity, who somewhat took charge of the scene, shouted back to them and tried to find a way down to them. I spent much of the next two hours searching through the collapsed buildings for people or for ways down to people that we had somewhat located — trying not to think about aftershocks.

The usual saviors turned up — scores of young men. They searched through all the buildings, helping out mostly old people, passing some in blankets down fire escapes. Gradually, slowly, there began to be professional emergency people — emts, docs, random cops, and then a fire truck. The fire guys were great, swarmed right into the buildings, but they had NO WATER and we had a beginning smoke in the top of one of the collapsed buildings. My chief regret now is that we didn't swarm up there and put that out, with a bucket brigade if need be. I should have at least scoped it out visually and reported.

The whole Marina was crumpled, streets and sidewalks cracked and mangled, most of the buildings somewhat settled, with lower floors shrunk in height. Streets gradually filled with people — it was an hour before we had much of a population. Many high on catastrophe, some stone hysterical when they saw a building with loved ones in it completely collapsed and now on fire. People tried to comfort them but what do you say?

Meanwhile the fire was growing in a building where we had a couple deeply buried. I spotted a second smoke down low and dangerous, and the fire trucks still didn't have water, so it grew. We should have worked faster. Much shouting among the diggers, some with the people buried, ("Don't tell them the building is burning!"), much chopping and sawing. We should have used the power saw in that building first. Suddenly there were open flames on the top floor, and though the firetrucks now had some water, and we were hauling hose in all directions, we couldn't even slow the fire. Immediately the whole top floor was burning, billowing flames and smoke into the sky. The rescuers abandoned the building. The heat backed us off. Then we saw a bare arm in one window, followed by a bare male torso. We yelled for the guy to jump out, and young men rushed into the heat to grab him. He was burned and cut and inconsolable: his wife Janet was still in there. Two minutes later the whole building collapsed in flames.

I checked the first building: they were taking out the last victim, a woman with a crushed pelvis. The TV crews were showing up — by now about 6:30 pm. The buildings next to the burning one were catching fire and even buildings across the street were igniting — a bucket brigade did quench that. Swarms of people; I didn't see anything else useful I could do and drove home to Marin with the after-adrenaline shakes. From the bridge that goddamned little smoke had become a tower of flame and smoke dominating the dark cityscape.

Lessons: When you see a fire starting, do ANYTHING to stop it, right now. When you see open flames catching, get the hell out fast.

Writing this the day after the quake, I've heard reports that Richard Schauffler, our promotion manager, was also at the Marina at the time of the quake, helping to drag people out of buildings. With power and phones out sporadically and spottily throughout the city news is hard to verify. The most reliable source has been the WELL, which David Hawkins (dhawk) restored to service only six hours after the quake. The WELL community logged on and filed reports all through the night with such clarity and poignant narratives that immediately

correspondents from The New York Times *and* Wall Street Journal *asked for permission to quote them. Dhawk frequently posted the list of everyone who had logged on since the jolt, a handy on-line roll call. Friends could console and hang out despite the downed bridges. Things were serious. Cliff Figallo, the WELL's director, called the quake "The Big Enough One."*

When it hit, I was in our main building trying to print out a different gossip than what you are reading. On the run back to my office, I met production manager Lori, who was visibly shaken. A half hour earlier she had said that the weather — hot (unusual for the Bay Area), dry and still — made her feel like an earthquake was imminent. Then the disaster came . . . and now look at your office, she urged. We thought you were still there.

She pointed to the large-closet-sized cubbyhole that I call my office. It used to be piled to the ceiling with hundreds of books, magazines, and papers. Now it was waist-high in debris, with the massive bookshelves floating on top, sprawled over where my chair used to be. Had I been there I would have been laid low by those millions of words — an appropriate editor's demise, I guess.

Two weeks earlier Stewart had stood in my doorway and knowingly eyed the tower of pages surrounding me. "If there is an earthquake here, you'll be the first to know," he said. I smiled sheepishly, chuckled, and went back to work on the book I was reading.

Day after the quake, office manager Susan Rosberg was answering the phones, "Whole Earthquake." —*Kevin Kelly*

The WELL

Cliff Figallo
Director

John Coate
Marketing Director

Robin Gail Ramsey
Accounts Manager

Nancy Rhine
Customer Support Manager

David Hawkins
System Administrator

Andy Beals
Technical Consultant

Patricia Henderson
Bookkeeper

POINT FOUNDATION BOARD

Chuck Blitz
Stewart Brand
Doug Carlston
Robert Fuller
Paul Hawken
Huey Johnson
Kevin Kelly

Stewart Brand
Publisher Emeritus

Kevin Kelly
Editor

Richard Nilsen
Assistant Editor

Corinne Cullen Hawkins
Editorial Assistant

Kathleen O'Neill
Design

Donald Ryan
Camera, Pasteup, Design

James Donnelly
Waste Management

Lori Woolpert
Production Manager

Hank Roberts
Proofreading

Richard Ditzler
Bookkeeper

David Burnor
Index, Librarian

Keith Jordan
Circulation, Mailing List

Richard Schauffler
Circulation, Promotion

Paul Davis
Reader Services Guru

Susan Rosberg
Director of Customer Services

Susan Erkel Ryan
Data Entry

Robert Crumb,
Jaime Hernandez,
Tony Jenkins
Illustrations

Stephanie Leonard
Fundraiser

Jeanne Carstensen
Whole Earth Column

J. Baldwin
Soft Tech and Nomadics

Richard Nilsen,
Peter Warshall
Land Use

Art Kleiner
Communications

Robert Horvitz
Washington Correspondent

Jay Kinney
Media, Politics

FINANCIAL REPORT
3RD QUARTER 1989

INCOME

Subscriptions/back issues	$ 185,835
Mailing list rental	5,418
Direct distribution	18,541
Newsstand sales	16,515
Book sales	840
Newspaper column	1,839
Contributions	7,281
Other	10,926
Total Income:	**$ 247,195**

EXPENSES

Salaries	60,737
Payroll taxes	6,175
Magazine printing	27,817
Circulation promotion	6,635
Subscription fulfillment	20,362
Rent/maintenance/utilities	11,447
Writers/contributors	9,155
Telephone/postage	4,726
Direct distribution	1,727
Newsstand sales	2,882
Vacation/health insurance	2,477
Other	21,235
Total Expenses:	**$ 175,375**
MAGAZINE PROFIT/LOSS	**$ +71,820**

POINT FOUNDATION

INCOME

Whole Earth Review	247,195
Whole Earth Institute	1,875
Total Point Income:	**$ 249,070**

EXPENSES

Whole Earth Institute	$ 5,288
Whole Earth Review	175,375
Total Point Expenses:	**$ 180,663**
POINT PROFIT/LOSS	**$ +68,407**

THE WELL

REVENUE	**$ 121,339**

EXPENSES

Payroll	$ 44,842
Computer/communications	38,644
Office	10,403
General/administrative	11,092
Sales	5,865
Total Expenses:	**$ 110,846**
WELL PROFIT/LOSS	**$ 10,493**

Mailing List Brokers: **Pacific Lists,** Mill Valley, CA; **Triplex Direct Marketing Corporation,** San Rafael, CA.

Photo Processing and Reprographics: **Caledonia Camera,** Sausalito, CA; **Marinstat,** Mill Valley, CA.

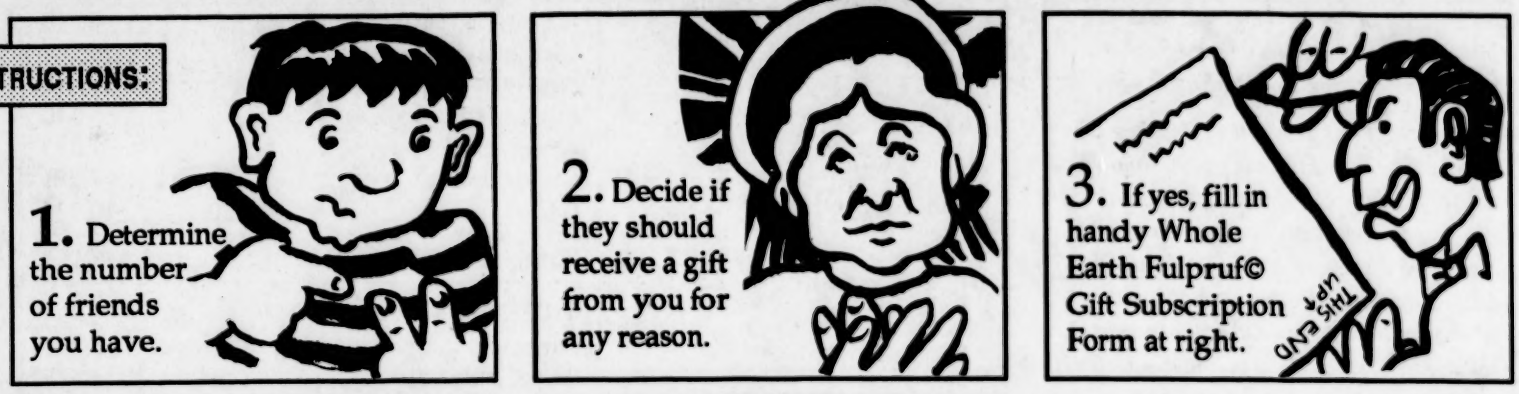
Printing: **Combined Communication Services,** Columbia, MO.

PAINLESS! FOOLPROOF! CHEAP SUBSCRIPTIONS!

$20 for the first 1-year subscription

$12 for each additional subscription

—40% off the regular price!



Everything else will be done by us:

1. We'll send a Gift Card informing recipient of your thoughtfulness.

2. We'll send gift recipient a whole year of Whole Earth Review.

THE WHOLE EARTH HOLIDAY FLEA MARKET

While you're at it, why not take the time right now to choose a gift or gifts from among these currently available Whole Earth books and Catalogs — or use some of the money you've saved on gift subscriptions to get a book for yourself.

We'll ship your book order via UPS anywhere in the continental US for just $2 extra per item — and if you get your order to us by December 1st, we'll guarantee UPS delivery by December 25th.

Just choose from the items listed below and then fill out the postage-paid form at the far right.

THE FRINGES OF REASON:

A Field Guide to New Age Frontiers, Unusual Beliefs & Eccentric Sciences.

This Whole Earth Catalog of weird stuff grew out of Ted Schultz's special issue of WER (#52), our all-time bestseller.Fringes presents expert opinion from skeptics and true believers on spontaneous human combustion, alien abductions, flat earth, Atlantis, etc.
$16 postpaid.

SIGNAL:

Access to Communication Tools and Information Frontiers.

Our comprehensive catalog of high-tech, low-tech, and no-tech human communications (acting, speaking, video, homemade TV, computers, home recording, etc., etc.) Over 900 new and classic products, books and magazines reviewed on 228 oversized pages.
$18 postpaid.

THE ESSENTIAL WHOLE EARTH CATALOG

(1986).

Packs a wealth of information of the what-it-is, how-to-use-it, where-to-get-it type into a smaller, handier size. Over 400 illustrated pages of the best, from crafts, climbing and communications to learning, landscaping, and beyond.
$20 postpaid.

THE ELECTRONIC WHOLE EARTH CATALOG

CD-ROM Version.

Illustrated with over 4,000 high quality digitized images and more than 400 digitized sound clips — over 300 megabytes of information! Also offers powerful searching, aided by instantaneous cross-referencing. (For Macintosh Plus/SE/II with Apple CD SC; requires 1Mb., System 4.2 or later.)
$153 postpaid.

NEWS THAT STAYED NEWS.

A collection of the best writing from ten years of The Co-Evolution Quarterly, forerunner to Whole Earth Review. "A three-ring circus of writing, a treat for anybody who enjoys juggling ideas or going out on the intellectual high wire without a net."
—*LA Times.*
$17 postpaid.

Give Whole Earth Review

Yes, I'd like to share Whole Earth Review with a friend or relative. Please send the following gift subscription(s) on my behalf and send a card to the recipient announcing my gift.

$20 FOR THE FIRST 1-YEAR SUBSCRIPTION

$12 FOR EACH ADDITIONAL SUBSCRIPTION

(40% OFF THE REGULAR PRICE)

Send Whole Earth Review as my gift to:

Name _____

Address _____

City/State/Zip/Country _____

_____

____ New ____ Renewal

Send Whole Earth Review as my gift to:

Name _____

Address _____

City/State/Zip/Country _____

_____

____ New ____ Renewal

My Name _____

Address _____

City/State/Zip/Country _____

_____

____ P.S. Send *me* a year of Whole Earth Review

____ New ____ Renewal 365

____ Bill me

____ Check or money order enclosed

(US funds payable on a US bank)

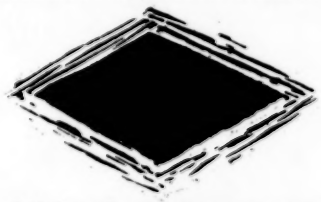
Charge my VISA ____ MasterCard ____

Card # _____-_____-_____-_____

Exp. date _____ /_____

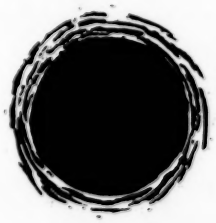
Signature _____

Please add $4 per year for Canadian and other foreign subscribers ($8 Air Mail).



Attach additional orders on a separate sheet.

New subscriptions begin with our next quarterly issue.



WHOLE EARTH REVIEW • P.O. Box 38, SAUSALITO, CA 94966 • 415/332-1716

BOOK ORDERS

THE FRINGES OF REASON	____ $16 each (postpaid) = _____
SIGNAL	____ $18 each (postpaid) = _____
THE ESSENTIAL WHOLE EARTH CATALOG	____ $20 each (postpaid) = _____
THE ELECTRONIC WHOLE EARTH CATALOG	____ $153 each (postpaid) = _____
NEWS THAT STAYED NEWS	____ $17 each (postpaid) = _____
Optional UPS delivery (continental US only)	____ $2 per item = _____

TOTAL = _____

My address:

Name _____

Address _____

City/State/Zip/Country _____

_____

365

_____ Check or money order enclosed

(US funds payable on a US bank)

Charge my VISA ____ MasterCard ____

Card # _____-_____-_____-_____

Exp. date ____ /____

Signature _____

SEND TO: WHOLE EARTH REVIEW • P.O. BOX 38, SAUSALITO, CA 94966 • 415/332-1716

COMING NEXT ISSUE:

Okay, we all know the earth's environment is messed up. So how do you fix it? Next issue is devoted to the tools, techniques, and strategies for restoring natural habitats to self-sustaining wholeness. Richard Nilsen has gathered news from local activists, amateur naturalists and professional environmentalists from around the world who have successfully restored a place, whether big or small. Their stories — of inspiration, toil, and mistakes along the way — are presented in our special issue on "Restoration." ■

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 13 SAUSALITO, CA

POSTAGE WILL BE PAID BY ADDRESSEE

WHOLE EARTH REVIEW

P.O. Box 38
Sausalito, CA 94966-9932

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 13 SAUSALITO, CA

POSTAGE WILL BE PAID BY ADDRESSEE

WHOLE EARTH REVIEW

P.O. Box 38
Sausalito, CA 94966-9932

No. 33

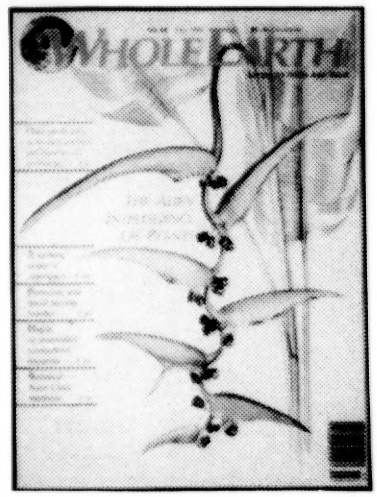
MORE BACK ISSUES

WHOLE EARTH REVIEW (*CoEvolution Quarterly* through issue #43)

Back issues can be ordered for $6 ppd., except where otherwise noted; "OOP" means out of print: bound, xeroxed copies of out of print issues are available for $30 ppd. Send all orders to:

Whole Earth Review • 27 Gate 5 Road • Sausalito, CA 94965 • (415) 332-1716.

No. 64



For issues 1 - 32 see the inside back cover of issue 64.

33. Spring 1982 - The nature of gender in our time, including a major piece by Ivan Illich; nonfiction melodrama by Will Baker; Anne Herbert's Rising Sun Neighborhood Newsletter.

34. Summer 1982 - Donella Meadows on long-term global modeling; a doctrine of unarmed military service; Admiral Hyman G. Rickover's management philosophy; how and why to work in local politics; Michael Phillips on the persistence of Viking culture in America; Paul Hawken on the economy.

35. Fall 1982 - Articles on "personal national peace-finding," rules of thumb; the native spirit of gift-giving; Gregory Bateson; raw and fanciful Texas talk, and an anti-space adventure.

36. Winter 1982 - "When Things Go Wrong," a guest-edited section featuring J. Baldwin on designing with failure; Wendell Berry on the use of forms in poetry and marriage; letters from Gregory Bateson; Stewart Brand interviewing Paul Hawken.

37. Spring 1983 - Fiction by Ken Kesey and Gary Snyder on urban culture in China; Steve Baer on human-machine teamwork; personal peacemaking in Kenya and Poland; deforestation.

38. Summer 1983 - Simple taxes and common sense government; citizen lobbying; James Lovelock on the Gaia Hypothesis; women's work, women singing and reflections of a farming woman; Lynda Barry on breaking up with men; the art of altering billboards.

39. Fall 1983 - Politics and Religion issue. Identifying sacred places with Gary Snyder; Christians involved in radical politics; Mother Teresa and the Nirmal Hriday Home in Calcutta; an acid rain prevention system.

40. Winter 1983 - Ivan Illich explores the encroachment of electronics upon human interactions; super insulation transforms old barns; listening to silent messages of coma patients by Steven Levine; stories of enemies and friends in the nations of Central America.

41. Spring 1984 - Epic elephant poetry by Heathcote Williams; observing ritual in the morgue, by Sallie Tisdale; coffee hour as America's true religion; and the many faces of Mu'Ammar Al-Qadhafi.

42. Summer 1984 - Nicaragua's Miskito Indians in oppostition to the Sandinistas; photo essay on changes in post-Mao China; the inside story on nuclear winter; power, politics and religion in the Roman Catholic Church.

43. Fall 1984 - A look at the night sky through civilization's glow; a personal attempt to put Gaian principles into practice; a way to raise indigenous theatre, and an uncommon bench by Christopher Alexander.

44. Winter 1985 - *CoEvolution Quarterly* becomes *Whole Earth Review* with this Computers as Poison issue; including a built-in computer software section. Also, the miseries of personal computing; visionary fiction by E.M. Forster, Peter Calthorpe on electronic sweatshops.

45. March 1985 - Viewing environmentalists as part of the problem; other articles on the art of recreating meadows, Wendell Berry on Edward Abbey; Anne Herbert on the effectiveness of feeling good; Peter Calthorpe on growing hospitable cities.

46. May 1985 - Anarchy in Italy; punk rock behind the Iron Curtain; Will Baker on the ambiguities of Nicaraguan politics; the first gathering of computer visionaries.

47. July 1985 - Digital retouching invades the world of photography; J. Baldwin and his highly evolved tool box; the role of small business in regional recovery by Robert Rodale; the pro side of clubbing seals.

48. Fall 1985 - The poodle-in-the-microwave issue or the making of Urban Legends; the health hazards of computer terminals; an early and candid report on how AIDS really works; being poor in America; Paul Hawken on the service of running a small business.

49. Winter 1985 - Special issue presenting Islam as solution rather than problem; women and Islam; the practice of salat (prayer); islamic economics. Why the Farm commune didn't work; Anne Herbert on assassinations.

50. Spring 1986 - Using public satellites to monitor public good; Sallie Tisdale on the hidden world of fire and severe skin burns; the virtues and success of Amish economics; personal radio systems.

51. Summer 1986 - Marvin Minsky finds that true intelligence results from a society of mind; a report on a commune that works; ineffective aid in drought - stricken Sahel; the implications of treating fetuses as human beings; Wendell Berry on the nature of a home-based economics. OOP.

52. Fall 1986 - The Fringes of Reason: strange beliefs and eccentric science. Includes folk concepts of outer space; behind the scenes of the Church of the Subgenius; a guide to faddish spiritual beliefs and anomalistic happenings like ball lightning and spontaneous human combustion. OOP.

53. Winter 1986 - Robert Fuller explores the possibilities of joining the Soviet Union and America into one country; a new Gaian politics with William Irwin Thompson; Dave Foreman and Earth First proposing a wilderness preserve system; Stewart Brand interviews Peter Schwartz and Jay Ogilvy on the World Information Economy. OOP.

54. Spring 1987 - "Hear That Long Snake Moan," by Michael Ventura—the first of two parts on the Voodoo origins of rock 'n' roll culture; Gordon Melton on why cults flourish; articles on marketing and advertising; the future of nanotechnology.

55. Summer 1987 - The Reality Club issue — Reading poetry out loud for maximum understanding; looking at the limitations of what can be known; the danger of getting what you really want; eliminating math from schools, and the pitfalls of current forest management practices. OOP.

56. Fall 1987 - Allen Ginsberg tells all; a look at the world's worst massacres; two views of adoption; Larry Gonick's cartoon guide to U.S. History; Afghanistan.

57. Winter 1987 — Xerox art, 'Zines, virtual communities, bio-acoustics, fractals and the underground cassette culture; information viruses and counterespionage tools, and R.U. Sirius critiques intelligence-enhancing drugs. OOP.

58. Spring 1988 - Special section on cultural geography, with articles by J.B. Jackson, Christopher Salter, Yi-Fu Tuan. Juggling girls in Tonga; the healing effects of madness, and the first entries in the artificial life 4-H show.

59. Summer 1988 - the rights of robots; patents for keeping severed heads alive; also the link between emotions and neuropeptides; introduction to all the tools you can rent; a guide to World Beat Music.

60. Fall 1988 - How one man restored life on a small Caribbean island; the first sightings of some computer parasites; the WELL; Harry Edwards speaks out about racism in athletics; the disposable diaper myth exposed at last.

61. Winter 1988 - "20th Anniversary Issue." 85 one-page essays and interviews by old timers and newcomers like Ed Abbey, Wendell Berry, Ken Kesey, Stephanie Mills, Ivan Illich, Jerry Brown, Lynn Margulis, R. Crumb; Gary Snyder; Michael Ventura on timelessness.

62. Spring 1989 - Revival of the goddess; the flourishing of a cooperative movement in Mondragon, Spain; environmental idealism in Costa Rica; and a section on feminist journals, women and martial arts.

63. Summer 1989 - Is the body obsolete?: downloading humans into computers; how culture shapes bodies; opinions by Susan Griffin, William Burroughs, and others.

64. Fall 1989 - Plants as teachers; why not to divulge your Social Security number; recommended resources for homeschooling. Virtual reality, a working model of cyberspace.

1P1Ø2Ø7 MAR113
UNIVERSITY MICROFILM
3Ø N Zeeb Serials Proc
Ann Arbor MI 481Ø6